

SALEM

CITY OF SALEM, ILLINOIS

CITY OFFICIALS:

Rex Barbee
Nicolas Farley
Craig Morton
Amy Troutt
Jim Koehler
Royce Bringwald
Annette Brushwitz

City Manager
Mayor
Councilman
Councilman
Councilman
Councilman
Public Works Director

SPECIFICATIONS AND CONTRACT DOCUMENTS FOR THE 2022 GAS LINE IMPROVEMENT (FY23) PROJECT

UTILITY SAFETY & DESIGN, INC
1927 Miller Drive
Olney, IL 62450

April, 2022

INVITATION FOR BIDS

PROPOSAL # P2022-13

SEPARATE sealed BIDS will be received by the City of Salem, Illinois at the City Hall in Salem until 2:00 P.M. local time on May 23, 2022 for the **2022 Gas Line Improvement Project (FY23)** in accordance with the CONTRACT DOCUMENTS prepared by Utility Safety & Design, Inc.

The project includes installation of approximately 4,100 ft. of 2” PE gas main replacement, (4) 2” PE valves, and (43) PE ½” gas service replacements.

CONTRACT DOCUMENTS may be obtained by qualified contractors upon application and payment of \$100.00 at the office of Utility Safety & Design, Inc., 1927 Miller Drive, Olney, Illinois 62450.

CONTRACT DOCUMENTS may be examined at the following locations:

City Hall, 101 South Broadway, Salem, Illinois 62881 Phone: (618) 548-2222

Utility Safety & Design, Inc., 1927 Miller Drive, Olney, Illinois 62450
Phone: (618) 392-5502.

EACH PROPOSAL shall be accompanied by a Certified Check, or an acceptable form of PROPOSAL GUARANTY in an amount equal to at least Five Percent (5%) of the amount of the PROPOSAL, payable to the order of the City of Salem, Illinois, as a guaranty that if the PROPOSAL is accepted, the BIDDER will execute the CONTRACT and file acceptable PERFORMANCE and PAYMENT BONDS within ten (10) days after the AWARD of the CONTRACT.

NO BIDDER may withdraw his BID within sixty (60) days following the opening of BIDS.

ATTENTION OF BIDDERS: To the extent and as required by “An Act regarding wages of laborers, mechanics and other workers employed in any public works by State, county, city or any public body or any political subdivision or anyone under contract for public works” approved June 26, 1941, as amended, the general prevailing rate of wages in this locality for laborers, mechanics and other workers engaged in construction of public works coming under the jurisdiction of the City of Salem is hereby ascertained to be the same as the prevailing rate of wages for construction work in the Marion County, Illinois area as determined by the Illinois Dept. of Labor as of June, 2022. As required by said Act, any and all revisions of the prevailing rate of wages by the Illinois Dept. of Labor shall supersede the Department’s May determination and apply to any and all public works construction undertaken by the City of Salem. The City of Salem is an Equal Opportunity Employer.

CITY OF SALEM

Rex Barbee
City Manager

Date: April 20, 2022

TABLE OF CONTENTS
FOR
2022 GAS LINE IMPROVEMENT (FY23) PROJECT
CITY OF SALEM

SECTION 1:

INSTRUCTION FOR BIDDERS	IB-1 TO IB- 3
PREVAILING WAGES, ILLINOIS DEPT. OF LABOR	1 TO 7
BID	B-1 TO B- 4
AGREEMENT	AGMT-1 TO AGMT-2
BID BOND	BB-1 TO BB-2
PAYMENT BOND	PB-1 TO PB-2
PERFORMANCE BOND	PB-3 TO PB- 4

SECTION 2: GENERAL CONDITIONS

GC-1 TO GC-17

SECTION 3: - TECHNICAL SPECIFICATIONS

SECTION 3.1 – GENERAL	1 TO 2
SECTION 3.2 - SCOPE OF WORK	3
SECTION 3.3 –MATERIALS	4 TO 5
SECTION 3.4 -EXCAVATING, BORING, TRENCHING AND BACKFILLING	6 TO 15
SECTION 3.5 – INSTALLATION	16 TO 23
SECTION 3.6 – PAYMENT	24

SECTION 4: - DRAWINGS

COVER SHEET	22-1
LAKEWOOD	22-2
DETAILS	22-3
HOUSE METER DETAILS	22-4

INSTRUCTION FOR BIDDERS

Article 1. Receipt and Opening of Bids

- A. Bids will be received by the City of Salem, Illinois at the City Hall in Salem until 2:00 P.M. local time on May 23, 2022.

Each Bid must be submitted in a sealed envelope, addressed to City of 101 South Broadway, Salem, Illinois 62881 and must be plainly marked as the Bid for **2022 Gas Line Improvement Project (FY23)**. The Bid may also be submitted by fax to the City of Salem at **618 / 548-5330**.

- B. All Bids must be made on the required Bid form enclosed in this bid document. All blank spaces for Bid prices must be filled in, in ink or typewritten, and the Bid form must be fully completed and executed when submitted. Two copies of the Bid form are required.
- C. The Owner may waive any informalities or minor defects or reject any and all Bids.
- D. Any Bid may be withdrawn prior to the above scheduled time for the opening of Bids or authorized postponement thereof. Any Bid received after the time and date specified shall not be considered. No Bidder may withdraw a Bid within 45 days after the actual date of the opening thereof. Should there be reasons why the contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the Owner and the Bidder.

Article 2. Examination Of Premises, Bidder's Requirements

- A. Bidders must satisfy themselves of the accuracy of the estimated quantities in the Bid Schedule by examination of the site and a review of the drawings and specifications including Addenda. After Bids have been submitted, the Bidder shall not assert that there was a misunderstanding concerning the quantities of Work or of the nature of the Work to be done.
- B. The Owner shall provide to Bidders prior to Bidding, all information which is pertinent to, and delineates and describes, the land owned and rights-of-way acquired or to be acquired.
- C. The Contract Documents contain the provisions required for the construction of the Project. Information obtained from an officer, agent, or employee of the Owner or any other person shall not affect the risks or obligations assumed by the Contractor or relieve him from fulfilling any of the conditions of the contract.

INSTRUCTION FOR BIDDERS

Article 3. Bid Security

Each Bid must be accompanied by a Bid Bond payable to the Owner for five percent (5%) of the total amount of the Bid. As soon as the Bid prices have been compared, the Owner will return the Bonds of all except the three lowest responsible Bidders. When the Agreement is executed the bonds of the two remaining unsuccessful Bidders will be returned. The Bid Bond of the successful Bidder will be retained until the Payment Bond and Performance Bond have been executed and approved, after which it will be returned. A certified check may be used in lieu of a Bid Bond.

Article 4. Security for Faithful Performance

- A. A Performance Bond and a Payment Bond, each in the amount of 100 percent of the Contract Price, with a corporate surety approved by the Owner, will be required for the faithful performance of the contract.
- B. Attorneys-in-fact who sign Bid Bonds, Payment Bonds and Performance Bonds must file with each Bond a certified and effective dated copy of their power of attorney.

Article 5. Award and Contract

The party to whom the contract is awarded will be required to execute the Agreement and obtain the Insurance Certificate, Performance Bond and Payment Bond within ten (10) calendar days from the date when Notice Of Award is delivered to the Bidder. The Notice Of Award shall be accompanied by the necessary Agreement form.

Article 6. Qualification of Bidder

The Owner may make such investigations as he deems necessary to determine the ability of the Bidder to perform the Work, and the Bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any Bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy the Owner that such Bidder is properly qualified to carry out the obligations of the Agreement and to complete the Work contemplated therein. A conditional or qualified Bid will not be accepted.

Article 7. Taxes, Permits and Fees by Contractor

- A. All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the Project shall apply to the contract throughout.
- B. Contractor will be required to pay, if required, all state and use taxes involved in the completion of work under this contract and shall pay all social security and unemployment

INSTRUCTION FOR BIDDERS

taxes and be responsible for withholding taxes and any other state or federal requirements in this regard.

- C. Contractor shall obtain all permits and pay all necessary fees required to execute the project.

Article 8. Award and Contract

- A. Each Bidder is responsible for inspecting the site and for reading and being thoroughly familiar with the Contract Documents. The failure or omission of any Bidder to do any of the foregoing shall in no way relieve any Bidder from any obligation in respect to his Bid.
- B. The successful Bidder agrees to abide by the requirements under Executive Order No. 11246, as amended, including specifically the provisions of the equal opportunity clause set forth in the General Conditions.
- C. Contractor shall supply the names and addresses of major material Suppliers and Subcontractors for Owner's approval.
- D. To the extent and as required by "An Act regarding wages of laborers, mechanics and other workers employed in any public works by State, county, city or any public body or any political subdivision or anyone under contract for public works" approved June 26, 1941, as amended, the general prevailing rate of wages in this locality for laborers, mechanics and other workers engaged in construction of public works coming under the jurisdiction of the City of Salem is hereby ascertained to be the same as the prevailing rate of wages for construction work in the Marion County, Illinois area as determined by the Illinois Dept. of Labor as of June 2022. As required by said Act, any and all revisions of the prevailing rate of wages by the Illinois Dept. of Labor shall supersede the Department's July determination and apply to any and all public works construction undertaken by the City of Salem.
- E. The City of Salem is an Equal Opportunity Employer.

Article 9.

- A. The Engineer is **UTILITY SAFETY & DESIGN, INC.**, 1927 Miller Drive, Olney, Illinois 62450. Phone number (618) 392-5502, Fax (618) 392-2261.

Marion County Prevailing Wage Rates posted on 3/7/2022

Trade Title	Rg	Type	C	Base	Foreman	Overtime				H/W	Pension	Vac	Trng	Other Ins
						M-F	Sa	Su	Hol					
ASBESTOS ABT-GEN	All	ALL		29.50	29.95	1.5	1.5	2.0	2.0	7.73	17.69	0.00	0.90	
ASBESTOS ABT-MEC	All	BLD		32.60	33.60	1.5	1.5	2.0	2.0	9.70	6.25	0.00	0.50	
BOILERMAKER	All	BLD		39.75	43.25	1.5	1.5	2.0	2.0	7.07	25.26	0.00	1.06	
BRICK MASON	All	BLD		35.42	37.55	1.5	1.5	2.0	2.0	8.80	15.45	0.00	0.89	
CARPENTER	All	BLD		38.62	40.12	1.5	1.5	2.0	2.0	7.95	10.30	0.00	0.65	
CARPENTER	All	HWY		39.02	40.77	1.5	1.5	2.0	2.0	7.95	10.30	0.00	0.65	
CEMENT MASON	All	BLD		31.33	32.83	1.5	1.5	2.0	2.0	9.85	9.67	0.00	0.50	
CEMENT MASON	All	HWY		30.59	32.09	1.5	1.5	2.0	2.0	9.85	9.69	0.00	0.30	
CERAMIC TILE FINISHER	All	BLD		27.16	27.16	1.5	1.5	2.0	2.0	8.35	8.00	0.00	0.82	
ELECTRIC PWR EQMT OP	All	ALL	1	47.02		1.5	1.5	2.0	2.0	8.35	13.17	0.00	0.47	
ELECTRIC PWR EQMT OP	All	ALL	2	41.93		1.5	1.5	2.0	2.0	8.35	11.74	0.00	0.42	
ELECTRIC PWR GRNDMAN	All	ALL		34.43		1.5	1.5	2.0	2.0	8.35	9.64	0.00	0.34	
ELECTRIC PWR LINEMAN	All	ALL		59.09	63.11	1.5	1.5	2.0	2.0	8.35	16.54	0.00	0.59	
ELECTRICIAN	All	ALL		47.08	49.33	1.5	1.5	2.0	2.0	8.93	15.30	0.00	0.95	
ELECTRONIC SYSTEM TECH	All	BLD		37.10	40.10	1.5	1.5	2.0	2.0	8.18	7.23	0.00	0.40	
ELEVATOR CONSTRUCTOR	All	BLD		53.46	60.14	2.0	2.0	2.0	2.0	15.87	19.31	4.28	0.64	
FLOOR LAYER	All	BLD		36.08	36.83	1.5	1.5	2.0	2.0	7.95	10.30	0.00	0.65	
GLAZIER	All	BLD		30.18	31.43	1.5	1.5	2.0	2.0	6.57	9.25	0.00	0.60	
HEAT/FROST INSULATOR	All	BLD		40.18	41.18	1.5	1.5	2.0	2.0	11.04	13.25	0.00	0.85	
IRON WORKER	All	ALL		36.50	38.50	1.5	1.5	2.0	2.0	10.46	18.50	0.00	0.42	
LABORER	All	BLD		28.50	28.95	1.5	1.5	2.0	2.0	7.73	17.69	0.00	0.80	
LABORER	All	HWY		28.50	28.95	1.5	1.5	2.0	2.0	7.73	17.69	0.00	0.80	
MACHINIST	All	BLD		50.68	53.18	1.5	1.5	2.0	2.0	8.93	8.95	1.85	1.47	
MARBLE FINISHER	All	BLD		27.16	27.16	1.5	1.5	2.0	2.0	8.35	8.00	0.00	0.82	
MARBLE MASON	All	BLD		32.66	32.66	1.5	1.5	2.0	2.0	8.35	9.20	0.00	0.91	
MILLWRIGHT	All	BLD		38.62	40.12	1.5	1.5	2.0	2.0	7.95	10.30	0.00	0.65	
MILLWRIGHT	All	HWY		39.02	40.77	1.5	1.5	2.0	2.0	7.95	10.30	0.00	0.65	
OPERATING ENGINEER	All	BLD	1	40.85	43.85	1.5	1.5	2.0	2.0	14.10	18.80	0.00	1.45	
OPERATING ENGINEER	All	BLD	2	39.72	43.85	1.5	1.5	2.0	2.0	14.10	18.80	0.00	1.45	
OPERATING ENGINEER	All	BLD	3	35.24	43.85	1.5	1.5	2.0	2.0	14.10	18.80	0.00	1.45	
OPERATING ENGINEER	All	BLD	4	41.85	43.85	1.5	1.5	2.0	2.0	14.10	18.80	0.00	1.45	

OPERATING ENGINEER	All	BLD	5	42.85	43.85	1.5	1.5	2.0	2.0	14.10	18.80	0.00	1.45	
OPERATING ENGINEER	All	BLD	6	43.40	43.85	1.5	1.5	2.0	2.0	14.10	18.80	0.00	1.45	
OPERATING ENGINEER	All	BLD	7	43.70	43.85	1.5	1.5	2.0	2.0	14.10	18.80	0.00	1.45	
OPERATING ENGINEER	All	BLD	8	44.00	43.85	1.5	1.5	2.0	2.0	14.10	18.80	0.00	1.45	
OPERATING ENGINEER	All	BLD	9	44.65	43.85	1.5	1.5	2.0	2.0	14.10	18.80	0.00	1.45	
OPERATING ENGINEER	All	HWY	1	39.35	42.35	1.5	1.5	2.0	2.0	14.10	18.80	0.00	1.45	
OPERATING ENGINEER	All	HWY	2	38.22	42.35	1.5	1.5	2.0	2.0	14.10	18.80	0.00	1.45	
OPERATING ENGINEER	All	HWY	3	33.74	42.35	1.5	1.5	2.0	2.0	14.10	18.80	0.00	1.45	
OPERATING ENGINEER	All	HWY	4	40.35	42.35	1.5	1.5	2.0	2.0	14.10	18.80	0.00	1.45	
OPERATING ENGINEER	All	HWY	5	41.35	42.35	1.5	1.5	2.0	2.0	14.10	18.80	0.00	1.45	
OPERATING ENGINEER	All	HWY	6	41.90	42.35	1.5	1.5	2.0	2.0	14.10	18.80	0.00	1.45	
OPERATING ENGINEER	All	HWY	7	42.20	42.35	1.5	1.5	2.0	2.0	14.10	18.80	0.00	1.45	
OPERATING ENGINEER	All	HWY	8	42.50	42.35	1.5	1.5	2.0	2.0	14.10	18.80	0.00	1.45	
OPERATING ENGINEER	All	HWY	9	43.15	42.35	1.5	1.5	2.0	2.0	14.10	18.80	0.00	1.45	
PAINTER	All	ALL		26.50	27.00	1.5	1.5	2.0	2.0	6.95	11.36	0.00	0.70	
PAINTER OVER 30 FT.	All	ALL		29.60	30.10	1.5	1.5	2.0	2.0	6.95	11.36	0.00	0.70	
PAINTER PWR EQMT	All	ALL		29.60	30.10	1.5	1.5	2.0	2.0	6.95	11.36	0.00	0.70	
PILEDRIVER	All	BLD		38.62	40.12	1.5	1.5	2.0	2.0	7.95	10.30	0.00	0.65	
PILEDRIVER	All	HWY		39.02	40.77	1.5	1.5	2.0	2.0	7.95	10.30	0.00	0.65	
PIPEFITTER	All	BLD		38.50	42.35	1.5	1.5	2.0	2.0	9.57	7.65	0.00	1.00	
PLASTERER	All	BLD		31.33	32.83	1.5	1.5	2.0	2.0	9.85	9.67	0.00	0.50	
PLUMBER	All	BLD		38.50	42.35	1.5	1.5	2.0	2.0	9.57	7.65	0.00	1.00	
ROOFER	All	BLD		29.35	30.35	1.5	1.5	2.0	2.0	9.40	5.55	0.00	0.00	
SHEETMETAL WORKER	All	ALL		37.54	39.04	1.5	1.5	2.0	2.0	10.75	9.50	2.25	0.71	1.80
SPRINKLER FITTER	All	BLD		43.45	46.45	1.5	1.5	2.0	2.0	10.55	14.22	0.00	0.52	
TERRAZZO FINISHER	All	BLD		27.16	27.16	1.5	1.5	2.0	2.0	8.35	8.00	0.00	0.82	
TERRAZZO MASON	All	BLD		32.66	32.66	1.5	1.5	2.0	2.0	8.35	9.20	0.00	0.91	
TRUCK DRIVER	All	ALL	1	39.96	44.32	1.5	1.5	2.0	2.0	14.02	7.14	0.00	0.25	
TRUCK DRIVER	All	ALL	2	40.54	44.32	1.5	1.5	2.0	2.0	14.02	7.14	0.00	0.25	
TRUCK DRIVER	All	ALL	3	40.86	44.32	1.5	1.5	2.0	2.0	14.02	7.14	0.00	0.25	
TRUCK DRIVER	All	ALL	4	41.21	44.32	1.5	1.5	2.0	2.0	14.02	7.14	0.00	0.25	
TRUCK DRIVER	All	ALL	5	42.32	44.32	1.5	1.5	2.0	2.0	14.02	7.14	0.00	0.25	
TRUCK DRIVER	All	O&C	1	31.97	35.46	1.5	1.5	2.0	2.0	14.02	7.14	0.00	0.25	
TRUCK DRIVER	All	O&C	2	32.43	35.46	1.5	1.5	2.0	2.0	14.02	7.14	0.00	0.25	
TRUCK DRIVER	All	O&C	3	32.69	35.46	1.5	1.5	2.0	2.0	14.02	7.14	0.00	0.25	
TRUCK DRIVER	All	O&C	4	32.97	35.46	1.5	1.5	2.0	2.0	14.02	7.14	0.00	0.25	

TRUCK DRIVER	All	O&C	5	33.86	35.46	1.5	1.5	2.0	2.0	14.02	7.14	0.00	0.25	
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Legend

Rg Region

Type Trade Type - All,Highway,Building,Floating,Oil & Chip,Rivers

C Class

Base Base Wage Rate

OT M-F Unless otherwise noted, OT pay is required for any hour greater than 8 worked each day, Mon through Fri. The number listed is the multiple of the base wage.

OT Sa Overtime pay required for every hour worked on Saturdays

OT Su Overtime pay required for every hour worked on Sundays

OT Hol Overtime pay required for every hour worked on Holidays

H/W Health/Welfare benefit

Vac Vacation

Trng Training

Other Ins Employer hourly cost for any other type(s) of insurance provided for benefit of worker.

Explanations MARION COUNTY

The following list is considered as those days for which holiday rates of wages for work performed apply: New Years Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Christmas Day and Veterans Day in some classifications/counties. Generally, any of these holidays which fall on a Sunday is celebrated on the following Monday. This then makes work performed on that Monday payable at the appropriate overtime rate for holiday pay. Common practice in a given local may alter certain days of celebration. If in doubt, please check with IDOL.

Oil and chip resealing (O&C) means the application of road oils and liquid asphalt to coat an existing road surface, followed by application of aggregate chips or gravel to coated surface, and subsequent rolling of material to seal the surface.

EXPLANATION OF CLASSES

ASBESTOS - GENERAL - removal of asbestos material/mold and hazardous materials from any place in a building, including mechanical systems where those mechanical systems are to be removed. This includes the removal of asbestos materials/mold and hazardous materials from ductwork or pipes in a building when the building is to be demolished at the time or at some close future date.

ASBESTOS - MECHANICAL - removal of asbestos material from mechanical systems, such as pipes, ducts, and boilers, where the mechanical systems are to remain.

CERAMIC TILE FINISHER AND MARBLE FINISHER

The handling, at the building site, of all sand, cement, tile, marble or stone and all other materials that may be used and installed by [a] tile layer or marble mason. In addition, the grouting, cleaning, sealing, and mixing on the job site, and all other work as required in assisting the setter. The term "Ceramic" is used for naming the classification only and is in no way a limitation of the product handled. Ceramic takes into consideration most hard tiles.

ELECTRIC POWER LINEMAN

Construction, maintenance and dismantling of overhead and underground electric power lines, including high voltage pipe type cable work, and associated structures and equipment.

ELECTRIC POWER EQUIPMENT OPERATOR - CLASS 1

Operation of all crawler type equipment D-4 and larger from the ground to assist the Electric Power Linemen in performing their duties.

ELECTRIC POWER EQUIPMENT OPERATORS - CLASS 2

Operation of all other equipment from the ground to assist the Electric Power Linemen in performing their duties.

ELECTRIC POWER GROUNDMAN

Applies to workers who assist the Electric Power Lineman from the ground.

ELECTRONIC SYSTEMS TECHNICIAN

Installation, service and maintenance of low-voltage systems which utilizes the transmission and/or transference of voice, sound, vision, or digital for commercial, education, security and entertainment purposes for the following: TV monitoring and surveillance, background/foreground music, intercom and telephone interconnect, field programming, inventory control systems, microwave transmission, multi-media, multiplex, radio page, school, intercom and sound burglar alarms and low voltage master clock systems.

Excluded from this classification are energy management systems, life safety systems, supervisory controls and data acquisition systems not intrinsic with the above listed systems, fire alarm systems, nurse call systems and raceways exceeding fifteen feet in length.

OPERATING ENGINEER - BUILDING

GROUP I. Cranes, Dragline, Shovels, Skimmer Scoops, Clamshells or Derrick Boats, Pile Drivers, Crane-Type Backhoes, Asphalt Plant Operators, Concrete Plant Operators, Dredges, Asphalt Spreading Machines, All Locomotives, Cable Ways or Tower Machines, Hoists, Hydraulic Backhoes, Ditching Machines or Backfiller, Cherrypickers, Overhead Cranes, Roller - Steam or Gas, Concrete Pavers, Excavators, Concrete Breakers, Concrete Pumps, Bulk Cement Plants, Cement Pumps, Derrick-Type Drills, Boat Operators, Motor Graders or Pushcats, Scoops or Tournapulls, Bulldozers, Endloaders or Fork Lifts, Power Blade or Elevating Graders, Winch Cats, Boom or Winch Trucks or Boom Tractors, Pipe Wrapping or Painting Machines, Asphalt Plant Engineer, Journeyman Lubricating Engineer, Drills (other than Derrick Type), Mud Jacks, or Well Drilling Machines, Boring Machines or Track Jacks, Mixers, Conveyors (Two), Air Compressors (Two), Water Pumps regardless of size (Two), Welding Machines (Two), Siphons or Jets (Two), Winch Heads or Apparatuses (Two), Light Plants (Two), All Tractors regardless of size (straight tractor only), Fireman on Stationary Boilers, Automatic Elevators, Form Grading Machines, Finishing Machines, Power Sub-Grader or Ribbon Machines, Longitudinal Floats, Distributor Operators on Trucks, Winch Heads or Apparatuses (One), Mobil Track air and heaters (two to five), Heavy Equipment Greaser, Relief Operator, Assistant Master Mechanic and Heavy Duty Mechanic, self-propelled concrete saws of all types and sizes with their attachments, gob-hoppers, excavators all sizes, the repair and greasing of all diesel hammers, the operation and set-up of bidwells, water blasters of all sizes and their clutches, hydraulic jacks where used for hoisting, operation of log skidders, iceolators used on and off of pipeline, condor cranes, bow boats, survey boats, bobcats and all their attachments, skid steer loaders and all their attachments, creter cranes, batch plants, operator (all sizes), self propelled roto mills, operation of conveyor systems of any size and any configuration, operation, repair and service of all vibratory hammers, all power pacs and their controls regardless of location, curtains or brush burning machines, stump cutter machines, Nail launchers when mounted on a machine or self-propelled, operation of con-cover machines, and all Operators except those listed below).

GROUP II. Assistant Operators.

GROUP III. Air Compressors (One), Water Pumps, regardless of Size (One), Waterblasters (one), Welding Machine (One), Mixers (One Bag), Conveyor (One), Siphon or Jet (One), Light Plant (One), Heater (One), Immobile Track Air (One), and Self Propelled

Walk-Behind Rollers.

GROUP IV. Asphalt Spreader Oilers, Fireman on Whirlies and Heavy Equipment Oilers, Truck Cranes, Dredges, Monigans, Large Cranes - (Over 65-ton rated capacity) Concrete Plant Oiler, Blacktop Plant Oiler, and Creter Crane Oiler (when required).

GROUP V. Oiler.

GROUP VI. Operators on equipment with Booms, including jibs, 100 feet and over, and less than 150 feet long.

GROUP VII. Operators on equipment with Booms, including jibs, 150 feet and over, and less than 200 feet long.

GROUP VIII. Operators on Equipment with Booms, including jibs, 200 feet and over; Tower Cranes; and Whirlie Cranes.

GROUP IX. Master Mechanic

OPERATING ENGINEERS - Highway

GROUP I. Cranes, Dragline, Shovels, Skimmer Scoops, Clamshells or Derrick Boats, Pile Drivers, Crane-Type Backhoes, Asphalt Plant Operators, Concrete Plant Operators, Dredges, Asphalt Spreading Machines, All Locomotives, Cable Ways or Tower Machines, Hoists, Hydraulic Backhoes, Ditching Machines or Backfiller, Cherrypickers, Overhead Cranes, Roller - Steam or Gas, Concrete Pavers, Excavators, Concrete Breakers, Concrete Pumps, Bulk Cement Plants, Cement Pumps, Derrick-Type Drills, Boat Operators, Motor Graders or Pushcats, Scoops or Tournapulls, Bulldozers, Endloaders or Fork Lifts, Power Blade or Elevating Graders, Winch Cats, Boom or Winch Trucks or Boom Tractors, Pipe Wrapping or Painting Machines, Asphalt Plant Engineer, Journeyman Lubricating Engineer, Drills (other than Derrick Type), Mud Jacks, Well Drilling Machines, Boring Machines, Track Jacks, Mixers, Conveyors (Two), Air Compressors (Two), Water Pumps regardless of size (Two), Welding Machines (Two), Siphons or Jets (Two), Winch Heads or Apparatuses (Two), Light Plants (Two), All Tractors regardless of size (straight tractor only), Fireman on Stationary Boilers, Automatic Elevators, Form Grading Machines, Finishing Machines, Power Sub-Grader or Ribbon Machines, Longitudinal Floats, Distributor Operators on Trucks, Winch Heads or Apparatuses (One), Mobil Track air and heaters (two to five), Heavy Equipment Greaser, Relief Operator, Assistant Master Mechanic and Heavy Duty Mechanic, self-propelled concrete saws of all types and sizes with their attachments, gob-hoppers, excavators all sizes, the repair and greasing of all diesel hammers, the operation and set-up of bidwells, water blasters of all sizes and their clutches, hydraulic jacks where used for hoisting, operation of log skidders, iceolators used on and off of pipeline, condor cranes, bow boats, survey boats, bobcats and all their attachments, skid steer loaders and all their attachments, creter cranes, batch plants, operator (all sizes), self propelled roto mills, operation of conveyor systems of any size and any configuration, operation, repair and service of all vibratory hammers, all power pacs and their controls regardless of location, curtains or brush burning machines, stump cutter machines, Nail launchers when mounted on a machine or self-propelled, operation of con-cover machines, and all Operators (except those listed below).

GROUP II. Assistant Operators.

GROUP III. Air Compressors (One), Water Pumps, regardless of Size (One), Waterblasters (one), Welding Machine (One), Mixers (One Bag), Conveyor (One), Siphon or Jet (One), Light Plant (One), Heater (One), Immobile Track Air (One), and Self Propelled Walk-Behind Rollers.

GROUP IV. Asphalt Spreader Oilers, Fireman on Whirlies and Heavy Equipment Oilers, Truck Cranes, Dredges, Monigans, Large Cranes - (Over 65-ton rated capacity) Concrete Plant Oiler, Blacktop Plant Oiler, and Creter Crane Oiler (when required).

GROUP V. Oiler.

GROUP VI. Operators on equipment with Booms, including jibs, 100 feet and over, and less than 150 feet long.

GROUP VII. Operators on equipment with Booms, including jibs, 150 feet and over, and less than 200 feet long.

GROUP VIII. Operators on Equipment with Booms, including jibs, 200 feet and over; Tower Cranes; and Whirlie Cranes.

GROUP IX. Mechanic

TRUCK DRIVER - BUILDING, HEAVY AND HIGHWAY CONSTRUCTION Class 1. Drivers on 2 axle trucks hauling less than 9 ton. Air compressor and welding machines and brooms, including those pulled by separate units, truck driver helpers, warehouse employees, mechanic helpers, greasers and tiremen, pickup trucks when hauling materials, tools, or workers to and from and on-the-job site, and fork lifts up to 6,000 lb. capacity.

Class 2. Two or three axle trucks hauling more than 9 ton but hauling less than 16 ton. A-frame winch trucks, hydrolift trucks, vactor trucks or similar equipment when used for transportation purposes. Fork lifts over 6,000 lb. capacity, winch trucks, four axle combination units, and ticket writers.

Class 3. Two, three or four axle trucks hauling 16 ton or more. Drivers on water pulls, articulated dump trucks, mechanics and working forepersons, and dispatchers. Five axle or more combination units.

Class 4. Low Boy and Oil Distributors.

Class 5. Drivers who require special protective clothing while employed on hazardous waste work.

TRUCK DRIVER - OIL AND CHIP RESEALING ONLY.

This shall encompass laborers, workers and mechanics who drive contractor or subcontractor owned, leased, or hired pickup, dump, service, or oil distributor trucks. The work includes transporting materials and equipment (including but not limited to, oils, aggregate supplies, parts, machinery and tools) to or from the job site; distributing oil or liquid asphalt and aggregate; stock piling material when in connection with the actual oil and chip contract. The Truck Driver (Oil & Chip Resealing) wage classification does not include supplier delivered materials.

TERRAZZO FINISHER

The handling of all materials used for Mosaic and Terrazzo work including preparing, mixing by hand, by mixing machine or transporting of pre-mixed materials and distributing with shovel, rake, hoe, or pail, all kinds of concrete foundations necessary for Mosaic and Terrazzo work, all cement terrazzo, magnesite terrazzo, Do-O-Tex terrazzo, epoxy matrix ter-razzo, exposed aggregate, rustic or rough washed for exterior or interior of buildings placed either by machine or by hand, and any other kind of mixture of plastics composed of chips or granules when mixed with cement, rubber, neoprene, vinyl, magnesium chloride or any other resinous or chemical substances used for seamless flooring systems, and all other building materials, all similar materials and all precast terrazzo work on jobs, all scratch coat used for Mosaic and Terrazzo work and sub-bed, tar paper and wire mesh (2x2 etc.) or lath. The rubbing, grinding, cleaning and finishing of same either by hand or by machine or by terrazzo resurfacing equipment on new or existing floors. When necessary finishers shall be allowed to assist the mechanics to spread sand bed, lay tarpaper and wire mesh (2x2 etc.) or lath. The finishing of cement floors where additional aggregate of stone is added by spreading or sprinkling on top of the finished base, and troweled or rolled into the finish and then the surface is ground by grinding machines.

Other Classifications of Work:

For definitions of classifications not otherwise set out, the Department generally has on file such definitions which are available. If a task to be performed is not subject to one of the classifications of pay set out, the Department will upon being contacted state which neighboring county has such a classification and provide such rate, such rate being deemed to exist by reference in this document. If no neighboring county rate applies to the task, the Department shall undertake a special determination, such special determination being then deemed to have existed under this determination. If a project requires these, or any classification not listed, please contact IDOL at 217-782-1710 for wage rates or clarifications.

LANDSCAPING

Landscaping work falls under the existing classifications for laborer, operating engineer and truck driver. The work performed by landscape plantsman and landscape laborer is covered by the existing classification of laborer. The work performed by landscape operators (regardless of equipment used or its size) is covered by the classifications of operating engineer. The work performed by landscape truck drivers (regardless of size of truck driven) is covered by the classifications of truck driver.

BID

Proposal of _____ (hereinafter called Bidder), organized and existing under the laws of the State of _____ doing business as _____.

To **City of Salem** (Hereinafter called Owner). In compliance with your Instruction for Bidder, Bidder hereby proposes to perform all Work for the **2022 Gas Line Improvement Project (FY23)**. Project in strict accordance with the Contract Documents, within the time set forth therein, and at the prices stated below. By submission of this Bid, each Bidder certifies, and in the case of a joint Bid each party thereto certifies as to his own organization, that this Bid has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this Bid with any other Bidder or with any competitor. In submitting this Bid, Bidder represents that:

- A. Bidder has familiarized itself with the nature and extent of the Bid Documents, Work, site, locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance or furnishing of the work.
- B. Bidder has correlated the results of all such observations, examinations and investigations, with the terms and conditions of the Bid Documents.
- C. Bidder has given Engineer written notice of all conflicts, errors or discrepancies that he has discovered in the Bid Documents and the written resolution thereof by Engineer is acceptable to Contractor.
- D. This Bid is genuine and is not made in the interest of or on behalf of any undisclosed person, firm or corporation, and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; bidder has not directly or indirectly induced or solicited any other bidder to put

BID

in a false or sham bid; Bidder has not solicited or induced any person, firm or corporation to refrain from bidding; and Bidder has not sought by collusion to obtain for himself any advantage over any other bidder or over the OWNER.

- E. Bidder will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age or national origin in connection with the performance of the work.

Bidder hereby agrees to commence Work under this contract on or before a date to be specified in the Notice To Proceed. *Contractor shall complete replacement concrete work within 30 days of that section of pipeline work.*

BID

BID SCHEDULE

DUE DATE: May 23, 2022 OWNER: City of Salem, IL

PROJECT: 2022 Gas Line Improvement Project (FY23)

Circle/Lakeview Drive

<u>No</u>	<u>Item</u>	<u>Unit</u>	<u>Quantity</u>	<u>Price/Unit</u>	<u>Total</u>
<u>1</u>	Install 2" PE Main (Bore)	L.F.	4,100		
<u>2</u>	Install 1/2" PE Service (Bore)	L.F.	6,500		
<u>3</u>	Install New 2" PE Valves Complete	EA.	4		
<u>4</u>	Install Meter Set Assembly & Service Tap	EA.	43		
<u>5</u>	Tie-In 3" PE to 2" PE	EA.	2		
<u>6</u>	3" Line Stop	EA.	1		
<u>7</u>	Sewer Locate	EA.	43		

TOTAL: \$ _____

_____ **DOLLARS**

(Total Bid Amount is to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.)

Proposal of _____ Address: _____

The above unit prices shall include all labor, materials where applicable, demolition, removal, overhead, profit, insurance, etc., to cover the finished work of the several kinds called for.

Bidder understands that the Owner reserves the right to reject any or all bids and to waive any informalities in the bidding.

The Bidder agrees that this bid shall be good and may not be withdrawn for a period of forty-five

BID

(45) calendar days after the scheduled closing time for receiving bids. Upon receipt of written notice of the acceptance of this bid, Bidder will execute the Construction Agreement attached, deliver a Surety Bond or Bonds as required by Article 22 of General Conditions and Insurance requirements as indicated by Article 21 of the General Conditions within ten (10) days.

Respectfully submitted:

By _____ Date _____

(SEAL -- if bid is by a corporation)

Attest: _____

(Business Address and Zip Code)

* Insert a corporation, a partnership, or an individual as applicable.

AGREEMENT

Project: 2022 Gas Line Improvement Project (FY23)

This AGREEMENT ("Contract"), dated this ___ day of _____, 2022 is by and between the City of Salem ("Owner") with address at 101 S. Broadway, Salem, Illinois 62881 and _____ ("Contractor"), a corporation with address at _____. Contractor agrees to perform the Work described in the Contract Documents, and Owner agrees to accept and pay for such Work in accordance with the Contract Documents, in accordance with the following.

Description of Project:

The project includes installation of approximately 4,100 ft. of 2" PE gas main replacement, (4) 2" PE valves, and (43) PE 1/2" gas service replacements.

Time Schedule:

Contractor shall start the Work within 30 calendar days after Owner's Notice to Proceed. *Contractor shall complete all work no later than December 16, 2022.*

Price:

Contractor shall perform the Work described herein (which shall include all labor, materials and other things to be furnished by the Contractor), for the Sum of \$ _____. Payments for Contractor's Allowable Costs shall be per the attached Bid Schedule. Contractor shall submit invoice for Allowable Costs at completion of Project.

Contract Documents:

The following Contract Documents constitute the Contract for the Work.

- A) Invitation for Bids
- B) Instruction For Bidders
- C) Bid
- D) Bid Bond
- E) Agreement
- F) Payment Bond
- G) Performance Bond
- H) Notice of Award
- I) Notice To Proceed
- J) General Conditions

AGREEMENT

- K) Special Conditions
- L) Drawings
- M) Technical Specifications describing the Work

5. Bond:

If Required, Contractor shall furnish a Payment Bond and a Performance Bond each in an amount equal to the Bid Price. See Article 22 of General Conditions.

IN WITNESS WHEREOF, the parties hereby cause this Construction Contract to be executed in duplicate as of the day and year first above written by their duly authorized representatives.

OWNER:

CONTRACTOR:

City of Salem

By _____

By _____

Name: _____

Name: _____

Title: _____

Title: _____

(SEAL)

ATTEST:

NAME

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned,

_____ as Principal, and

_____ as Surety, are hereby

held and firmly bound unto **2022 Gas Line Improvement Project (FY23)** as OWNER

in the penal sum of _____

for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors and assigns.

Signed, this _____ day of _____, 2022.

The condition of the above obligation is such that whereas the Principal has submitted to City of Salem, Illinois a certain BID, attached hereto

and hereby made a part hereof to enter into a contract in writing, for the **2022 Gas Line Improvement Project (FY23)**.

NOW, THEREFORE,

- (1) If said BID shall be rejected, or
- (2) If said BID shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said BID) and shall in all other respects perform the agreement created by the acceptance of said BID, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such BID; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

Principal (L.S.)

Surety

By: _____

IMPORTANT:

Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

_____, hereinafter called Principal,
(Corporation, Partnership or Individual)

and _____
(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto

City of Salem, Illinois

(Name of Owner)

City Hall, 101 South Broadway, Salem, Illinois 62881

(Address of Owner)

hereinafter called OWNER, in the penal sum of _____, \$(_____)
in lawful money of the United States, for the payment of which sum well and truly to be made,
we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a
certain contract with the OWNER, dated the _____ day of _____, 2022
a copy of which is hereto attached and made a part hereof for the construction of:

2022 Gas Line Improvement Project (FY23)

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms,
SUBCONTRACTORS, and corporations furnishing materials for or performing labor in
the prosecution of the WORK provided for in such contract, and any authorized extension
or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal
and coke, repairs on machinery, equipment and tools, consumed or used in connection
with the construction of such WORK, and all insurance premiums on said WORK, and for
all labor, performed in such WORK whether by SUBCONTRACTOR or otherwise, then this
obligation shall be void; otherwise to remain in full force and effect.

PB-1

PROVIDED, FURTHER, that the said Surety for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the WORK to be performed there under or the SPECIFICATIONS accompanying the same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in _____ counterparts, each of which shall be deemed an original, this the _____ day of _____, 2022.

ATTEST:

(Principal) Secretary

Principal

(SEAL)

By: _____ (S)

Witness as to Principal

(Address)

(Address)

Surety

ATTEST:

Witness as to Surety

By

(Address)

Attorney-in-Fact

(Address)

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all partners should execute BONDS

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the PROJECT is located.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

_____, hereinafter called Principal,
(Corporation, Partnership or Individual)

and _____
(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound
into _____

City of Salem
(Name of Owner)

City Hall, 101 South Broadway, Salem, Illinois 62881
(Address of Owner)

hereinafter called OWNER, in the penal sum of _____,

\$(_____)

in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents. THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER, dated the _____ day of _____, 2022 a copy of which is hereto attached and made a part hereof for the construction of:

2022 Gas Line Improvement Project (FY23)

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or without notice to the Surety and during the one year guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect.

GENERAL CONDITIONS

INDEX

ARTICLE		PAGE
	General Conditions Index	GC-1
Article 1	Definitions	GC-2
Article 2	Additional Instructions and Detail Drawings	GC-3
Article 3	Schedules, Reports and Records	GC-3
Article 4	Drawings and Specifications	GC-4
Article 5	Shop Drawings	GC-4
Article 6	Materials, Services and Facilities	GC-4
Article 7	Inspection and Testing	GC-5
Article 8	Substitutions	GC-6
Article 9	Patents	GC-6
Article 10	Surveys, Permits, Regulations	GC-6
Article 11	Protection of Work, Property, Persons	GC-7
Article 12	Supervision by Contractor	GC-7
Article 13	Changes in the Work	GC-8
Article 14	Changes in Contract Price	GC-8
Article 15	Time for Completion and Liquidate Damages	GC-8
Article 16	Correction of Work	GC-9
Article 17	Subsurface Conditions	GC-9
Article 18	Suspension of Work, Termination and Delay	GC-10
Article 19	Payments to Contractor	GC-11
Article 20	Acceptance of Final Payment as Release	GC-12
Article 21	Insurance	GC-13
Article 22	Contract Security	GC-14
Article 23	Assignments	GC-14
Article 24	Separate Contracts	GC-15
Article 25	Subcontracting	GC-15
Article 26	Engineer's Authority	GC-16
Article 27	Land and Rights-of-Way	GC-16
Article 28	Guaranty	GC-16
Article 29	Taxes	GC-17

GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS

Wherever used in the Contract Documents, the following terms shall have the meanings indicated which shall be applicable to both the singular and plural thereof:

“Addenda” means written or graphic instruments used prior to the execution of the agreement which modify or interpret the Contract Documents, Drawings and Specifications, by additions, deletions, clarifications or corrections.

“Bid” means the offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

“Bidder” means any person, firm or corporation submitting a Bid for the Work.

“Bonds” means Bid, Performance, and Payment Bonds and other instruments of security, furnished by the Contractor and his surety in accordance with the Contract Documents.

“Change Order” means a written order to the Contractor authorizing an addition, deletion or revision in the Work within the general scope of the Contract Documents, or authorizing an adjustment in the Contract Price or Contract Time.

“Contract Documents” means the contract, including Instruction for Bidders, Bid, Construction Agreement, Payment Bond, Performance Bond, Notice of Award, Notice to Proceed, General Conditions, Special Conditions, Change Order, Drawings, Specifications, and Addenda.

“Contract Price” means the Total monies payable to the Contractor under the terms and conditions of the Contract Documents.

“Contract Time” means the number of calendar days stated in the Contract Documents for the completion of the Work.

“Contractor” means the person, firm or corporation with whom the Owner has executed the Agreement.

“Drawings” means the part of the Contract Drawings which show the characteristics and scope of the Work to be performed and which have been prepared or approved by the Engineer.

“Engineer” means the person, firm or corporation named as such in the Contract Documents.

“Field Order” means a written order affecting a change in the Work not involving an adjustment in the Contract Price or an extension of the Contract Time, issued by the Engineer to the Contractor during construction.

“ Notice of Award” means the written notice of the acceptance of the Bid from the Owner to the successful Bidder.

Notice to Proceed’ means written communication issued by the Owner to the Contractor authorizing him to proceed with the Work and establishing the date of commencement of the Work.

GENERAL CONDITIONS

“Owner” means City of Salem, Illinois.

“Owner’s Representative” means the authorized representative of the Owner who is assigned to the Project site or any part thereof.

“Project” means the undertaking to be performed as provided in the Contract Documents.

“Shop Drawings” means all drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the Contractor, a Subcontractor, manufacturer, Supplier or distributor, which illustrate how specific portions of the Work shall be fabricated or installed.

“Specifications” means a part of the Contract Documents consisting of written descriptions of a technical nature of materials, equipment, construction systems, standards and workmanship.

“Subcontractor” means an individual, firm or corporation having a direct contract with the Contractor or with any other Subcontractor for the performance of a part of the Work at the site.

“Substantial Completion” means that date as certified by the Engineer when the construction of the Project or a specified part thereof is sufficiently completed, in accordance with the Contract Documents, so that the Project or specified part can be utilized for the purposes for which it is intended.

“Special Conditions” means modifications to General Conditions.

“Supplier” means any person or organization who supplies materials or equipment for the Work, including that fabricated to a special design, but who does not perform labor at the site.

“Work” means all labor necessary to produce the construction required by the Contract Documents, and all materials and equipment incorporated or to be incorporated in the Project.

“Written Notice” means any notice to any party of the Agreement relative to any part of this Agreement in writing and considered delivered and the service thereof completed, when posted by certified or registered mail to the said party at his last given address, or delivered in person to said party or his authorized representative on the Work.

ARTICLE 2 - ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS

A. The Contractor may be furnished additional instructions and detail drawings, by the Engineer, as necessary to carry out the Work required by the Contract Documents.

B. The additional drawings and instructions thus supplied will become a part of the Contract Documents. The Contractor shall carry out the Work in accordance with the additional detail drawings and instructions.

ARTICLE 3 - SCHEDULES, REPORTS AND RECORDS

A. The Contractor shall submit to the Owner such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records and other data where applicable as are required by the Contract Documents for the Work to be performed.

GENERAL CONDITIONS

B. Prior to the first partial payment estimate the Contractor shall submit construction progress schedules showing the order in which he proposes to carry on the Work, including dates at which he will start the various parts of the Work and estimated date of completion of each part.

C. The Contractor shall also submit a schedule of payments that he anticipates he will earn during the course of the Work.

ARTICLE 4 - DRAWINGS AND SPECIFICATIONS

A. The intent of the Drawings and Specifications is that the Contractor shall furnish all labor, materials, tools, equipment, and transportation necessary for the proper execution of the Work in accordance with the Contract Documents and all incidental work necessary to complete the Project in an acceptable manner, ready for use, occupancy or operation by the Owner.

B. In case of conflict between the Drawings and Specifications, the Specifications shall govern. Figure dimensions on Drawings shall govern over scale dimensions, and detailed Drawings shall govern over general Drawings.

C. Any discrepancies found between the Drawings and Specifications and site conditions or any inconsistencies or ambiguities in the Drawings or Specifications shall be immediately reported to the Engineer, in writing, who shall promptly correct such inconsistencies or ambiguities in writing. Work done by the Contractor after his discovery of such discrepancies, inconsistencies or ambiguities shall be done at the Contractor's risk.

ARTICLE 5 - SHOP DRAWINGS

A. The Contractor shall provide Shop Drawings as may be necessary for the prosecution of the Work as required by the Contract Documents. The Engineer shall promptly review all Shop Drawings. The Engineer's approval of any Shop Drawing shall not release the Contractor from responsibility for deviations from the Contract Documents. The approval of any Shop Drawing which substantially deviates from the requirement of the Contract Documents shall be evidenced by a Change Order.

B. When submitted for the Engineer's review, Shop Drawings shall bear the Contractor's certification that he has reviewed, checked and approved the Shop Drawings and that they are in conformance with the requirements of the Contract Documents.

B. Portions of the Work requiring a Shop Drawing or sample submission shall not begin until the Shop Drawing or submission has been approved by the Engineer. A copy of each approved Shop Drawing and each approved sample shall be kept in good order by the Contractor at the site and shall be available to the Engineer.

GENERAL CONDITIONS

ARTICLE 6 - MATERIALS, SERVICES AND FACILITIES

- A. It is understood that, except as otherwise specifically stated in the Contract Documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and deliver the Work within the specified time.
- B. Materials and equipment shall be so stored as to insure the preservation of their quality and fitness for the Work. Stored materials and equipment to be incorporated in the Work shall be located so as to facilitate prompt inspection.
- C. Manufactured articles, materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer.
- D. Materials, supplies and equipment shall be in accordance with samples submitted by the Contractor and approved by the Engineer.
- E. Materials, supplies or equipment to be incorporated into the Work shall not be purchased by the Contractor or the Subcontractor subject to a chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller.

ARTICLE 7 - INSPECTION AND TESTING

- A. All materials and equipment used in the construction of the Project shall be subject to adequate inspection and testing in accordance with generally accepted standards, as required and defined in the Contract Documents.
- B. The Owner shall provide all inspection and testing services not required by the Contract Documents.
- C. The Contractor shall provide at his expense the testing and inspection services required by the Contract Documents.
- D. If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any Work to specifically be inspected, tested, or approved by someone other than the Contractor, the Contractor will give the Engineer timely notice of readiness. The Contractor will then furnish the Engineer the required certificates of inspection, testing or approval.
- E. Inspections, tests or approvals by the Engineer or others shall not relieve the Contractor from his obligations to perform the Work in accordance with the requirements of the Contract Documents.
- F. The Engineer and his representatives will at all times have access to the Work. In addition, authorized representatives and agents of any participating Federal or state agency shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records. The Contractor will provide proper facilities for such access and observation of the Work and also for any inspection or testing thereof.

GENERAL CONDITIONS

G. If any Work is covered contrary to the written instructions of the Engineer it must, if requested by the Engineer, be uncovered for his observation and replaced at the Contractor's expense.

H. If the Engineer considers it necessary or advisable that covered Work be inspected or tested by others, the Contractor, at the Engineer's request, will uncover, expose or otherwise make available for observation, inspection or testing as the Engineer may require, that portion of the Work in question, furnishing all necessary labor, materials, tools, and equipment. If it is found that such Work is defective, the Contractor will bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction. If, however, such Work is not found to be defective, the Contractor will be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction and an appropriate Change Order shall be issued.

ARTICLE 8 - SUBSTITUTIONS

A. Whenever a material, article, or piece of equipment is identified on the Drawings or Specifications by reference to brand name or catalogue number, it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements and that other products of equal capacities, quality and function shall be considered. The Contractor may recommend the substitution of a material, article, or piece of equipment of equal substance and function for those referred to in the Contract Documents by reference to brand name or catalogue number, and if, in the opinion of the Engineer, such material, article, or piece of equipment is of equal substance and function to that specified, the Engineer may approve its substitution and use by the Contractor. Any cost differential shall be deductible from the Contract Price and the Contract Documents shall be appropriately modified by Change Order. The Contractor warrants that if substitutes are approved, no major changes in the function or general design of the Project will result. Incidental changes or extra component parts required to accommodate the substitute will be made by the Contractor without a change in the Contract Price or Contract Time.

ARTICLE 9 - PATENTS

A. The Contractor shall pay all applicable royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and save the Owner harmless from loss on account thereof, except that the Owner shall be responsible for any such loss when a particular process, design, or the product of a particular manufacturer or manufacturers is specified, however if the Contractor has reason to believe that the design, process or product specified is an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information to the Engineer.

ARTICLE 10 - SURVEYS, PERMITS, REGULATIONS

A. The Owner's Representative shall furnish all boundary surveys and establish all base lines for locating the principal component parts of the Work together with a suitable number of bench marks adjacent to the Work as shown in the Contract Documents. From the information provided by the Owner, unless otherwise specified in the Contract Documents, the Contractor shall develop and make all detail surveys needed for construction such as slope stakes,

GENERAL CONDITIONS

batter boards, stakes for pile locations and other working points, lines, elevations and cut sheets.

B. The Contractor shall carefully preserve bench marks, reference points and stakes and, in case of willful or careless destruction, he shall be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.

C. Permits and licenses of a temporary nature necessary for the prosecution of the Work shall be secured and paid for by the Contractor unless otherwise stated in the Special Conditions. Permits, licenses and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the Owner, unless otherwise specified. The Contractor shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the Work as drawn and specified. If the Contractor observes that the Contract Documents are at variance therewith, he shall promptly notify the Engineer in writing, and any necessary changes shall be adjusted as provided in Section 13, Changes in the Work.

ARTICLE 11 - PROTECTION OF WORK, PROPERTY AND PERSONS

A. The Contractor will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. He will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to all employees on the Work and other persons who may be affected thereby, all the Work and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

B. The Contractor will comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction. He will erect and maintain, as required by the conditions and progress of the Work, all necessary safeguards for safety and protection. He will notify owners of adjacent utilities when prosecution of the Work may affect them. The Contractor will remedy all damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by the Contractor, any Subcontractor or anyone directly or indirectly employed by any of them or anyone for whose acts any of them be liable, except damage or loss attributable to the fault of the Contract Documents or to the acts or omissions of the Owner or the Engineer or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of the Contractor.

C. In emergencies affecting the safety of persons or the Work or property at the site or adjacent thereto, the Contractor, without special instruction or authorization from the Engineer or Owner, shall act to prevent threatened damage, injury or loss. He will give the Engineer prompt Written Notice of any significant changes in the Work or deviations from the Contract Documents caused thereby, and a Change Order shall thereupon be issued covering the changes and deviations involved.

GENERAL CONDITIONS

ARTICLE 12 - SUPERVISION BY CONTRACTOR

A. The Contractor will supervise and direct the Work. He will be solely responsible for the means, methods, techniques, sequences and procedures of construction. The Contractor will employ and maintain on the Work a qualified supervisor or superintendent who shall have been designated in writing by the Contractor as the Contractor's Representative at the site. The supervisor shall have full authority to act on behalf of the Contractor and all communications given to the supervisor shall be as binding as if given to the Contractor. The supervisor shall be present on the site at all times as required to perform adequate Supervision and coordination of the Work.

ARTICLE 13 - CHANGES IN THE WORK

A. The Owner may, at any time, as the need arises, order changes within the scope of the Work without invalidating the Agreement. If such changes increase or decrease the amount due under the Contract Documents, or in the time required for performance of the Work, an equitable adjustment shall be authorized by Change Order.

B. The Engineer also may, at any time by issuing a Field Order, make changes in the details of the Work. The Contractor shall proceed with the performance of any changes in the Work so ordered by the Engineer unless the Contractor believes that such Field Order entitles him to a change in Contract Price or Time or both, in which event he shall give the Engineer Written Notice thereof within seven (7) days after the receipt of the ordered change. Thereafter the Contractor shall document the basis for the change in Contract Price or Time within thirty (30) days. The Contractor shall not execute such changes pending the receipt of an executed Change Order or further instructions from the Owner.

ARTICLE 14 - CHANGES IN CONTRACT PRICE

A. The Contract Price may be changed only by a Change Order. The value of any Work covered by a Change Order or of any claim for increase or decrease in the Contract Price shall be determined by one or more of the following methods in the order of precedence listed below:

- a) Unit prices previously approved.
- b) An agreed lump sum.
- c) The actual cost for labor, direct overhead, materials, supplies, equipment, and other services necessary to complete the work. In addition there shall be added an amount to be agreed upon by not to exceed fifteen (15) percent of the actual cost of the Work to cover the cost of general overhead and profit.

ARTICLE 15 - TIME FOR COMPLETION AND LIQUIDATED DAMAGES

A. The date of beginning and the time for completion of the Work are essential conditions of the Contract Documents and the Work embraced shall be commenced on a date specified in the Notice To Proceed.

GENERAL CONDITIONS

B. The Contractor will proceed with the Work at such rate of progress to insure full completion within the Contract Time. It is expressly understood and agreed by and between the Contractor and the Owner that the Contract Time for the completion of the Work described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the Work.

C. If the Contractor shall fail to complete the Work within the Contract Time, or extension of time granted by the Owner, then the Contractor will pay to the Owner the amount for liquidated damages as specified in the Bid for each calendar day that the Contractor shall be in default after the time stipulated in the Contract Documents.

D. The Contractor shall not be charged with liquidated damages or any excess cost when the delay in completion of the Work is due to the following, and the Contractor has promptly given Written Notice of such delay to the Owner or Engineer.

- a) To any preference, priority or allocation order duly issued by the Owner.
- b) To unforeseeable causes beyond the control and without the fault or negligence of the Contractor, including but not restricted to, acts of God, or of the public enemy, acts of the Owner, acts of another Contractor in the performance of a contract with the Owner, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and abnormal and unforeseeable weather; and
- c) To any delays of Subcontractors occasioned by any of the causes specified in paragraphs "a" and "b" of this article.

ARTICLE 16 - CORRECTION OF WORK

A. The Contractor shall promptly remove from the premises all work rejected by the Engineer for failure to comply with the Contract Documents, whether incorporated in the construction or not, and the Contractor shall promptly replace and re-execute the Work in accordance with the Contract Documents and without expense to the Owner and shall bear the expense of making good all Work of other Contractors destroyed or damaged by such removal or replacement.

B. All removal and replacement Work shall be done at the Contractor's expense. If the Contractor does not take action to remove such rejected Work within ten (10) days after receipt of Written Notice, the Owner may remove such work and store the materials at the expense of the Contractor.

ARTICLE 17 - SUBSURFACE CONDITIONS

A. The Contractor shall promptly, and before such conditions are disturbed, except in the event of an emergency, notify the Owner by Written Notice of:

- a) Subsurface or latent physical conditions at the site differing materially from those indicated in the Contract Documents; or
- b) Unknown physical conditions at the site, of an unusual nature, differing materially

GENERAL CONDITIONS

from those ordinarily encountered and generally recognized as inherent in Work of the character provided for in the Contract Documents.

B. The Owner shall promptly investigate the conditions, and if he finds that such conditions do so materially differ and cause an increase or decrease in the cost of, or in the time required for performance of the Work, and equitable adjustment shall be made and the Contract Documents shall be modified by a Change Order. Any claim of the Contractor for adjustment hereunder shall not be allowed unless he has given the required Written Notice; provided that the Owner may, if he determines the facts to justify, consider and adjust any such claims asserted before the date of final payment.

ARTICLE 18 - SUSPENSION OF WORK, TERMINATION AND DELAY

A. The Owner may suspend the Work or any portion thereof for a period of not more than ninety (90) days or such further time as agreed upon by the Contractor, by Written Notice to the Contractor and the Engineer which notice shall fix the date on which Work shall be resumed. The Contractor will resume that Work on the date so fixed. The Contractor will be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension.

B. If the Contractor is adjudged a bankrupt or insolvent, or if he makes a general assignment for the benefit of his creditors, or if a trustee or receiver is appointed for the Contractor or for any of his property, or if he files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws, or if he repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment, or if he repeatedly fails to make prompt payments to Subcontractors or for labor, materials or equipment or if he disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction of the Work or if he disregards the authority of the Engineer, or if he otherwise violates any provision of the Contract Documents, then the Owner may, without prejudice to any other right or remedy and after giving the Contractor and his surety a minimum of ten (10) days from delivery of a Written Notice, terminate the services of the Contractor and take possession of the Project and of all materials, equipment, tools, construction equipment and machinery thereon owned by the Contractor, and finish the Work by whatever method he may deem expedient. In such case the Contractor shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds the direct and indirect costs of completing the Project, including compensation for additional professional services, such excess shall be paid to the Contractor. If such costs exceed such unpaid balance, the Contractor will pay the difference to the Owner. Such costs incurred by the Owner will be determined by the Engineer and incorporated in a Change Order.

C. Where the Contractor's services have been so terminated by the Owner, said termination shall not affect any right of the Owner against the Contractor then existing or which may thereafter accrue. Any retention or payment of monies by the Owner due the Contractor will not release the Contractor from compliance with the Contract Documents.

D. After ten (10) days from delivery of a Written Notice to the Contractor and the Engineer, the Owner may, without cause and without prejudice to any other right or remedy, elect to abandon the Project and terminate the Contract. In such case, the Contractor shall be paid for all Work executed and any expense sustained plus reasonable profit.

GENERAL CONDITIONS

E. If, through no act or fault of the Contractor, the Work is suspended for a period of more than ninety (90) days by the Owner or under an order of court or other public authority, or the Engineer fails to act on any request for payment within thirty (30) days after it is submitted, or the Owner fails to pay the Contractor substantially the sum approved by the Engineer or awarded by arbitrators within thirty (30) days of its approval and presentation, then the Contractor may, after ten (10) days from delivery of a Written Notice to the Owner and the Engineer, terminate the Contract and recover from the Owner payment for all Work executed and all expenses sustained. In addition and in lieu of terminating the Contract, if the Engineer has failed to act on a request for payment or if the Owner has failed to make any payment as aforesaid, the Contractor may upon ten (10) days written notice to the Owner and the Engineer stop the Work until he has been paid all amounts then due, in which event and upon resumption of the Work. Change Orders shall be issued for adjusting the Contract Price or extending the Contract Time or both to compensate for the costs and delays attributable to the stoppage of the Work.

F. If the performance of all or any portion of the Work is suspended, delayed, or interrupted as a result of a failure of the Owner or Engineer to act within the time specified in the Contract Documents, or if no time is specified, within a reasonable time, an adjustment in the contract Price or an extension of the Contract Time, or both, shall be made by Change Order to compensate the Contractor for the costs and delays necessarily caused by the failure of the Owner or Engineer.

ARTICLE 19 - PAYMENTS TO CONTRACTOR

A. At least ten (10) days before each progress payment falls due (but not more often than once a month), the Contractor will submit to the Engineer a partial payment estimate filled out and signed by the Contractor covering the Work performed during the period covered by the partial payment estimate and supported by such data as the Engineer may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at or near the site, the partial payment estimate shall also be accompanied by such supporting data, satisfactory to the Owner, as will establish the Owner's title to the material and equipment and protect his interest therein, including applicable insurance. The Engineer will, within ten (10) days after receipt of each partial payment estimate, either indicate in writing his approval of payment and present the partial payment estimate to the Owner, or return the partial payment estimate to the Contractor indicating in writing his reasons for refusing to approve payment. In the latter case, the Contractor may take the necessary corrections and resubmit the partial payment estimate. The Owner will, within ten (10) days of presentation to him of an approved partial payment estimate, pay the Contractor a progress payment on the basis of the approved partial payment estimate. The Owner shall retain ten (10) percent of the amount of each payment until final completion and acceptance of all work covered by the Contract Documents. The Owner at any time, however, after fifty (50) percent of the Work has been completed, if he finds that satisfactory progress is being made, shall reduce retain age to five (5) percent on the current and remaining estimates. When the Work is substantially complete (operational or beneficial occupancy), the retained amount may be further reduced below five (5) percent to only that amount necessary to assure completion. On completion and acceptance of a part of the Work on which the price is stated separately in the Contract documents, payment may be made in full, including retained percentages, less authorized deductions.

GENERAL CONDITIONS

- B. The request for payment may also include an allowance for the cost of such major materials and equipment which are suitably stored either at or near the site.
- C. Prior to substantial completion, the Owner, with the approval of the Engineer and with the concurrence of the Contractor, may use any completed or substantially completed portions of the Work. Such use shall constitute an acceptance of such portions of the Work.
- D. The Owner shall have the right to enter the premises for the purpose of doing work not covered by the Contract Documents. This provision shall not be construed as relieving the Contractor of the sole responsibility for the care and protection of the Work, or the restoration of any damaged Work except such as may be caused by agents or employees of the Owner.
- E. Upon completion and acceptance of the Work, the Engineer shall issue a certificate attached to the final payment request that the Work has been accepted by him under the conditions of the Contract Documents. The entire balance found to be due the Contractor, including the retained percentages, but except such sums as may be lawfully retained by the Owner, shall be paid to the Contractor within thirty (30) days of completion and acceptance of the Work.
- F. The Contractor will indemnify and save the Owner or the Owner's agents harmless from all claims growing out of the lawful demands of Subcontractors, laborers, workmen, mechanics, material men, and furnishers of machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the Work. The Contractor shall, at the Owner's request, furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged, or waived. If the Contractor fails to do so the Owner may, after having notified the Contractor, either pay unpaid bills or withhold from the Contractor's unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the Contractor shall be resumed, in accordance with the terms of the Contract Documents, but in no event shall the provisions of this sentence be construed to impose any obligations upon the Owner to either the Contractor, his Surety, or any third party. In paying any unpaid bills of the Contractor, any payment so made by the Owner shall be considered as a payment made under the Contract Documents by the Owner to the Contractor and the Owner shall not be liable to the Contractor for any such payments made in good faith.
- G. If the Owner fails to make payment thirty (30) days after approval by the Engineer, in addition to other remedies available to the Contractor, there shall be added to each such payment interest at the maximum legal rate commencing on the first day after said payment is due and continuing until the payment is received by the Contractor.

ARTICLE 20 - ACCEPTANCE OF FINAL PAYMENT AS RELEASE

- A. The acceptance by the Contractor of final payment shall be and shall operate as a release to the Owner of all claims and all liability to the Contractor other than claims in stated amounts as may be specifically excepted by the Contractor for all things done or furnished in connection with this Work and for every act and neglect of the Owner and others relating to or arising out of this Work. Any payment, however, final or otherwise, shall not release the Contractor or his sureties from any obligations under the Contract Documents or the Performance Bond and Payment Bonds.

GENERAL CONDITIONS

ARTICLE 21 - INSURANCE

- A. The Contractor shall purchase and maintain such insurance as will protect him and the City of Salem, Officials and Employees, from claims set forth below which may arise out of or result from the Contractor's execution of the Work, whether such execution be by himself or by any Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:
- a) Claims under workmen's compensation, disability benefit and other similar employee benefit acts;
 - b) Claims for damages because of bodily injury, occupational sickness or disease, or death of his employees;
 - c) Claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees;
 - d) Claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the Contractor, or (2) by any other person; and
 - e) Claims for damages because of injury to or destruction of tangible property, including loss of use resulting there-from.
- B. Certificates of Insurance acceptable to the Owner shall be filed with the Owner prior to commencement of the Work. These Certificates shall contain a provision that coverages afforded under the policies will not be canceled unless at least fifteen (15) days prior Written Notice has been given to the Owner.
- C. The Contractor shall procure and maintain, at his own expense, during the Contract Time, liability insurance as hereinafter specified;
- a) Contractor's General Public Liability and Property Damage Insurance including vehicle coverage issued to the Contractor and protecting him from all claims for personal injury, including death, and all claims for destruction of or damage to property, arising out of or in connection with any operations under the Contract Documents, whether such operations be by himself or by any Subcontractor under him, or anyone directly or indirectly employed by the Contractor or by a Subcontractor under him. Insurance shall be written with a limit of liability of not less than \$1,000,000 for all damages arising out of bodily injury, including death, at any time resulting there-from, sustained by any one person in any one accident; and a limit of liability of not less than \$1,000,000 aggregate for any such damages sustained by two or more persons in any one accident. Insurance shall be written with a limit of not less than \$1,000,000 for all property damage sustained by any one person in any one accident; and a limit of liability of not less than \$1,000,000 aggregate for any such damage sustained by two or more persons in any one accident.

GENERAL CONDITIONS

- b) The Contractor shall acquire and maintain, if applicable, Fire and Extended Coverage insurance upon the Project to the full insurable value thereof for the benefit of the Owner, the Contractor, and Subcontractors as their interest may appear. This provision shall in no way release the Contractor or Contractors' surety from obligations under the Contract Documents to fully complete the Project.

D. The Contractor shall procure and maintain, at his own expense, during the Contract Time, in accordance with the provisions of the laws of the state in which the work is performed. Workmen's Compensation Insurance, including occupational disease provisions, for all of his employees at the site of the Project and in case any work is sublet, the Contractor shall require such Subcontractor similarly to provide Workmen's Compensation Insurance, including occupational disease provisions for all of the latter's employees unless such employees are covered by the protection afforded by the Contractor. In case any class of employees engaged in hazardous work under this contract at the site of the Project is not protected under Workmen's Compensation statute, the Contractor shall provide, and shall cause each Subcontractor to provide, adequate and suitable insurance for the protection of his employees not otherwise protected.

E. The Contractor shall secure, if applicable, "All Risk" type Builder's Risk Insurance for Work to be performed. Unless specifically authorized by the Owner, the amount of such insurance shall not be less than the Contract Price totaled in the Bid. The policy shall cover not less than the losses due to fire, explosion, hail, lightning, vandalism, malicious mischief, wind, collapse, riot, aircraft, and smoke during the Contract Time, and until the Work is accepted by the Owner. The policy shall name as the insured the Contractor, the Engineer and the Owner.

ARTICLE 22 - CONTRACT SECURITY

A. The Contractor shall within ten (10) days after the receipt of the Notice of Award furnish the Owner with a Performance Bond and a Payment Bond in penal sums equal to the amount of the Contract Price, conditioned upon the performance by the Contractor of all undertakings, covenants, terms, conditions and agreements of the Contract Documents, and upon the prompt payment by the Contractor to all persons supplying labor and materials in the prosecution of the Work provided by the Contract Documents. Such Bonds shall be executed by the Contractor and a corporate bonding company licensed to transact such business in the state in which the Work is to be performed and named on the current list of "Surety Companies Acceptable on Federal Bonds" as published in the Treasury Department Circular Number 570. The expense of these Bonds shall be borne by the Contractor. If at any time a surety on any such Bond is declared a bankrupt or loses its right to do business in the state in which the Work is to be performed or is removed from the list of Surety Companies accepted on Federal Bonds, Contractor shall within ten (10) days after notice from the Owner to do so, substitute an acceptable Bond (or Bonds) in such form and sum and signed by such other surety or sureties as may be satisfactory to the Owner. The premiums on such Bond shall be paid by the Contractor. No further payments shall be deemed due nor shall be made until the new surety or sureties shall have furnished an acceptable Bond to the Owner.

ARTICLE 23 - ASSIGNMENTS

A. The Contractor will indemnify and hold harmless the Owner and the Engineer and their agents and employees from and against all claims, damages, losses and expenses including

GENERAL CONDITIONS

attorney's fees arising out of or resulting from the performance of the Work, provided that any such claims, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including the loss of use resulting therefrom; and is caused in whole or in part by any negligent or willful act or omission of the Contractor, and Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

B. In any and all claims against the Owner or the Engineer, or any of their agents or employees, by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under workmen's compensation acts, disability benefit acts or other employee benefits acts.

C. The obligation of the Contractor under this paragraph shall not extend to the liability of the Engineer, his agents or employees arising out of the preparation or approval of maps, Drawings, opinions, reports, surveys, Change Orders, designs or Specifications.

ARTICLE 24 - SEPARATE CONTRACTS

A. The Owner reserves the right to let other contracts in connection with this Project. The Contractor shall afford other Contractors reasonable opportunity for the introduction and storage of their materials and the execution of their Work, and shall properly connect and coordinate his Work with theirs. If the proper execution or results of any part of the Contractor's Work depends upon the Work of any other Contractor, the Contractor shall inspect and promptly report to the Engineer any defects in such Work that render it unsuitable for such proper execution and results.

B. The Owner may perform additional Work related to the Project by himself, or he may let other contracts containing provisions similar to these. The Contractor will afford the other Contractors who are parties to such Contracts (or the Owner, if he is performing the additional Work himself), reasonable opportunity for the introduction and storage of materials and equipment and the execution of Work, and shall properly connect and coordinate his Work with theirs.

C. If the performance of additional Work by other Contractors or the Owner is not noted in the Contract Documents prior to the execution of the Contract, written notice thereof shall be given to the Contractor prior to starting any such additional Work. If the Contractor believes that the performance of such additional Work by the Owner or others involves him in additional expense or entitles him to an extension of the Contract Time, he may make a claim therefor as provided in Sections 14 and 15.

ARTICLE 25 - SUBCONTRACTING

A. The Contractor may utilize the services of specialty Subcontractors on those parts of the Work which under normal contracting practices, are performed by specialty Subcontractors.

B. The Contractor shall not award Work to Subcontractor(s), in excess of fifty (50) percent of the Contract Price, without prior written approval of the Owner.

GENERAL CONDITIONS

C. The Contractor shall be fully responsible to the Owner for the acts and omissions of his Subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.

D. The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the Work to bind Subcontractors to the Contractor by the terms of the Contract Documents insofar as applicable to the Work of Subcontractors and to give the Contractor the same power as regards terminating any subcontract that the Owner may exercise over the Contractor under any provision of the Contract Documents.

E. Nothing contained in this Contract shall create any contractual relation between any Subcontractor and the Owner.

ARTICLE 26 - ENGINEER'S AUTHORITY

A. The Engineer shall act as the Owner's representative during the construction period. He shall decide questions which may arise as to quality and acceptability of materials furnished and Work performed. He shall interpret the intent of the Contract Documents in a fair and unbiased manner. The Engineer will make visits to the site and determine if the Work is proceeding in accordance with the Contract Documents.

B. The Contractor will be held strictly to the intent of the Contract Documents in regard to the quality of materials, workmanship and execution of the Work. Inspections may be made at the factory or fabrication plant of the source of material supply.

C. The Engineer will not be responsible for the construction means, controls, techniques, Sequences, procedures, or construction safety.

D. The Engineer shall promptly make decisions relative to interpretation of the Contract Documents.

ARTICLE 27 - LAND AND RIGHTS-OF-WAY

A. Prior to issuance of Notice to Proceed, the Owner shall obtain all land and rights-of-way necessary for carrying out and for the completion of the Work to be performed pursuant to the Contract Documents, unless otherwise mutually agreed.

B. The Owner shall provide to the Contractor information which delineates and describes the lands owned and rights-of-way acquired.

C. The Contractor shall provide at his own expense and without liability to the Owner any additional land and access thereto that the Contractor may desire for temporary construction facilities, or for storage of materials.

GENERAL CONDITIONS

ARTICLE 28 - GUARANTY

A. The Contractor shall guarantee all materials and equipment furnished and Work performed for a period of one (1) year from the date of Substantial Completion. The Contractor warrants and guarantees for a period of one (1) year from the date of Substantial Completion of the system that the completed system is free from all defects due to faulty materials or workmanship and the Contractor shall promptly make such corrections as may be necessary by reason of such defects including the repairs of any damage to other parts of the system resulting from such defects. The Owner will give notice of observed defects with reasonable promptness. In the event that the Contractor should fail to make such repairs, adjustments, or other Work that may be made necessary by such defects, the Owner may do so and charge the Contractor the cost thereby incurred. The Performance Bond shall remain in full force and effect through the guarantee period.

ARTICLE 29 - TAXES

A. The Contractor will pay all sales, consumer, use and other similar taxes required by the law of the place where the Work is performed.

SECTION 3.1 **GENERAL**

3.1.01 ENUMERATION OF DRAWINGS, SPECIFICATIONS AND ADDENDA

The following Drawings and Specifications for the **2022 Gas Line Improvement Project (FY23)** form a part of the Contract as set forth in the General Conditions.

COVER SHEET	22-1
LAKEWOOD	22-2
DETAILS	22-3
HOUSE METER DETAILS	22-4

3.1.02 QUANTITIES OF ESTIMATE

Wherever the estimated quantities of work to be done and materials to be furnished under this Contract are shown in any of the Documents, including the Bid Schedule, they are given for use in comparing Bids and the right is especially reserved, except as herein otherwise specifically limited, to increase or diminish them as may be deemed reasonably necessary or desirable by the Owner to complete the work contemplated by this Contract.

3.1.03 SEQUENCE OF CONSTRUCTION AND CONSTRUCTION SCHEDULE

The sequence of construction and construction schedule shall be filed with the Engineer for his approval prior to construction. They shall show order of construction and starting/completion dates and shall be adhered to with reasonable accuracy.

3.1.04 APPLICABLE CODES

All of the Work shall be governed by and shall be performed in accordance with the following codes and standards, except where the Contract Documents specifically require a greater degree or quality of work: 49 Code of Federal Regulations, Part 192; Illinois Commerce Commission; and the latest Edition of GPTC Guide. Contractor must meet Owners Operator Qualification requirements and provide copies to the Owner. If there is any conflict or discrepancy among these codes and standards, Contractor shall perform in accordance with the code or standard requiring the greater degree or higher quality of work.

3.1.05 QUALIFICATION OF WELDERS

- A. Polyethylene Pipe and Fittings
Contractor shall use the pipe Manufacturers Qualification Procedure for joining

of the polyethylene pipe and fittings. A copy of the procedure shall be available to the persons making and inspecting joints at the site where joining is accomplished. No person may make a joint in a plastic pipe unless that person has been qualified. Qualifications shall be in accordance with Owners O & M procedures and Section 192.285 of the DOT Title 49 Regulations, and the Manufacturers Qualification Procedure. Contractor shall provide the City of Salem a copy of Contractors PE Qualification and Operator Qualification prior to construction.

SECTION 3.2

SCOPE OF WORK

3.2.01 GENERAL

The proposed work consists of furnishing all labor, new materials, tools, equipment and services necessary for the construction of the **2022 Gas Line Improvement Project (FY23)**, including all other incidental work as shown on the Drawings and as herein specified.

The project includes installation of approximately 4,100 ft. of 2" PE gas main replacement, (4) 2" PE valves, and (43) PE ½" gas service replacements.

The exact course of the pipeline route is indicated on the associated Drawings. The stakes shall be of such regularity that the continuity of the line is maintained throughout its course.

Contractor shall be charged with full responsibility for agreement of the work with the staked route. Preservation of the stakes shall be the responsibility of the Contractor. Any carelessness or negligence on the part of the Contractor, sub-contractor, or employees that results in loss or misalignment of the stakes will require that the cost of replacement be borne by Contractor.

As construction requires movement of the station stakes, Contractor will relocate the stakes to the edge of the right-of-way approximately perpendicular to the centerline of the pipeline location and across the backfill.

Owner retains the right to make changes or alterations in the routing.

3.2.02 RESPONSIBILITY

It shall be the responsibility of the Contractor to furnish and install a complete and working system to perform the intended purposes as required by the Drawings and these Specifications. The Contractor shall be responsible for all details which may be necessary to properly install, adjust, pig and test and place into operation the complete installation. The work shall not be considered complete until all required records (see Section 3.5.14) have been turned in to the Gas Superintendent. Costs of all such details shall be included in the bid.

The Contractor shall Guarantee that the materials furnished shall be properly installed and, when properly operated, shall perform the duty for which it is intended. He shall guarantee all materials, workmanship, and completed installation to be first class in every particular and shall, at his own expense, furnish and replace any part or parts that may prove defective in workmanship within one (1) year from the date of substantial completion.

SECTION 3.3

MATERIALS

3.3.01 GENERAL

Materials and material handling associated with the gas mains, service and appurtenances to be constructed shall be in compliance with this specification and the following specifications for materials.

All materials to be utilized in this replacement are to be new and are to be thoroughly examined by the Contractor prior to installation. Any cracked, chipped, bent, scarred, or otherwise damaged material shall be returned to the supplier for replacement by the Contractor.

3.3.02 OWNER FURNISHED GAS PIPING

The following items shall be furnished by the Owner and installed by the Contractor. The Specifications on the material involved is as follows:

1. PIPE

<u>Quantity</u>	<u>Size, O.D.</u>	<u>SDR</u>	<u>Wall Thickness</u>	<u>Type</u>	<u>Material</u>
4,100 L.F.	2.375"	11.0	0.216"	Coil	PE-2406/2708
6,500 L.F.	1.315"	11.0	0.120"	Coil	PE-2406/2708

2. FITTINGS: (All PE should be 2406/2708)

	<u>Quantity</u>
1 PE Valve 2" Ball valve, 150 psig, Kerotest or equal	(4)
2 Electrofusion Tapping Tee 2" x 1/2" CTS with 400 EFV& Permasert outlet	(43)
3 Electrofusion High Volume Tapping Tee 3" x 2" IPS	(1)
4 Electrofusion High Volume Tapping Tee 2" x 2" IPS	(3)
5 Highline Valve Box, 35" -53" adjustment, Gas lid	(4)
6 Anodeless Riser 1" NPT x 1/2" CTS PE with Perfection Permasert outlet	(43)
7 1" Service Valves	(43)
8 Wire Junctions, suitable for underground burial	(55)
9 3" IPS Electrofusion Coupling	(1)
10 2" IPS Electrofusion Coupling	(23)
11 2" PE Ell, 90°	(3)
12 2" Electrofusion End Cap	(1)
13 3" Electrofusion End Cap	(1)
14 3" Mueller BottomOut	(1)
15 3" Steel Ell, 90°, STD Wall, Grade B	(2)
16 3" Steel End Cap, STD Wall, Grade B	(2)
17 3" x 2" Steel Reducer, Concentric, STD Wall, Grade B	(1)
18 2" Transition, Steel to MDPE	(1)

Contractor shall furnish all necessary supervision labor, equipment, and supplies to promptly move and string on right-of-way all Owner furnished pipe required for the Project. All handling of pipe shall be in such a manner that will avoid damage to the pipe.

The Contractor shall be accountable for all materials issued to him. There shall be no allowance for waste. Any other items, materials, tools, equipment or facilities required to complete the Work shall be furnished by the Contractor at his expense.

3.3.03 CONTRACTOR FURNISHED MATERIALS

All materials necessary for the complete construction of the **2022 Gas Line Improvement Project (FY23)** shall be furnished by the Contractor. It shall include, but not limited to, the following items:

- A) Any couplings and fittings necessary for the complete construction of the Project (Fittings and pipe necessary to connect to customer piping, etc.)
- A) All test equipment necessary to complete pressure testing of all main and services.

3.3.04 CARE AND HANDLING

Care shall be exercised to avoid rough handling. Pipe shall not be dragged, dropped or have other objects dropped on it. Caution shall be exercised to prevent kinking, buckling, flattening, or other damage. Any damage which occurs shall be removed by cutting out as a cylinder.

Coated pipe shall be carefully inspected prior to use for cuts, scratches, gouges, and other imperfections. Defective pipe shall not be used. Coated pipe shall also be protected from fire, excessive heat, or harmful chemicals.

Special padded forks, padded calipers or nylon slings shall be used in handling, and storage shall be on padded skids spaced to give adequate support.

SECTION 3.4

EXCAVATING, BORING, TRENCHING AND BACKFILLING

3.4.01 **SCOPE** - Furnish all materials, equipment, labor, and related items required to complete work indicated on the Drawings and/or Specifications. Attention is directed to the General Conditions and also other Sections of the Specifications which affect the work under this Section. The work under this Section includes, but is not limited to, the following items:

Excavation, Sheet piling and Backfill of gas main, bores and related items.

3.4.02 **GENERAL**

Excavating and backfill shall include all excavation, backfilling, compacting, and disposal of surplus material, restoration of all disturbed surfaces and all other work incidental to the construction of trenches, including any additional excavation which may be required for the installation of the pipeline.

- A) Risk - The Contractor must assume the risk of encountering quicksand, hardpan, high water tables, and other soil types which might hinder or slow his progress. No claim for additional compensation shall be entertained on account of the character of the ground in which the excavation is being made.

3.4.03 **SURFACE AND SUBSURFACE STRUCTURES AND OBSTRUCTIONS**

Various underground and surface structures may, or may not, be shown on the Drawings. The location and dimensions of such structures, where given, do not purport to be absolutely correct. The structures are plotted on the Drawings for the information of the Contractor, but information so given is not to be construed as a representation that such structures will be found or encountered as plotted. Other structures may also be encountered which are not shown on the Drawings.

- A) Utilities - The Contractor shall be aware that utility companies may have buried facilities in some areas of the gas line construction. Before the Contractor begins operations, he shall notify all utility companies affected by construction and request their assistance. Contractor shall also comply with Illinois law and the JULIE System requirements. The Contractor, however, shall be solely responsible for the location of all utilities.

Private sewers are not registered in the JULIE system, and therefore are not located by any utility company. Therefore, it will be required for the Contractor, at his expense, to locate and expose by whatever means necessary each residence and businesses sewer that the new pipeline will be crossing or be near prior to boring and/or trenching.

The Contractor shall maintain, in operating condition, all utilities encountered in his work. When the Contractor intends to interrupt utility service, the owner of

the utility, the Owner's Representative and the Contractor shall mutually agree upon a date and time for interruptions which are convenient for the utility and to the utility customer. The Contractor shall indicate to the Owner's Representative at the Pre-Construction Meeting where, and how long, the service interruption will occur. No additional compensation shall be allowed if it is determined necessary to interrupt the existing utility at a time which is beyond regular working hours.

- B) Utility Damage - Any damage to existing utilities as a result of this construction shall be repaired to the satisfaction of the owner of the utility at the Contractor's expense, whether or not said utilities are shown on the Drawings. If such repairs are not made promptly or satisfactorily, the Owner's Representative may have the repairs made, or may deduct the cost thereof from any moneys due, or become due, the Contractor.
- C) Clearance With Underground Utility Structures - Hidden structures should be located in advance of ditching and the owner consulted to co-ordinate activities. Presence of the utility Owner's representative should be requested to observe work and protect the owner's property. A minimum clearance of twenty-four inches (24") should be provided from foreign structures, unless otherwise approved by the Owner's Representative.
- D) Property Damage - The Contractor shall be entirely responsible for all damages to streets, pavements, sidewalks, curbs, fences, culverts, buildings, or other structures of any kind met with during the completion of the work; and shall be liable for damages to public or private property resulting therein, which amount may be deducted from any moneys due him for work done.
- E) Restoration of Property - All existing streets, sidewalks, alleys, driveways, entrances, road shoulders, parking areas, lawns, signs, fences, sheds, and other miscellaneous property and drainage features which are removed to allow for the construction, or damaged by it, whether or not the Contractor has paid for the damage under a specific measurement and payment section, shall be restored to a condition at least equivalent to that which existed at the commencement of the work; unless additional written arrangements are made satisfactory to the owner of said property. The Contractor shall be solely liable for damages to items described herein and moneys due him may be withheld to cover such damages.

Suitable crossings shall be provided and maintained over the open ditch, where necessary, to permit property owners and the general public to move equipment, or vehicular traffic, over the excavation.

- F) Trees and Shrubs - Existing trees and shrubs within easements and right-of-ways shall be protected from damage and when such trees and shrubs are in the way of construction, the Owner's Representative may instruct the Contractor to prune branches interfering with the work, or remove and dispose of trees and shrubs, or transplant trees and shrubs out of the way of the construction, and the Contract Price shall not be

increased for the performance of such work. The Contractor shall be liable for damages to trees and shrubs which were to have been protected as directed by the Owner's Representative, unless such damages are determined by the Owner's Representative to have been unavoidable, and moneys due to Contractor may be withheld to cover such damages.

- G) Area Utilities - Before beginning work in an area, the Contractor shall comply with Illinois law and for location of utilities, contact JULIE (1-800-892-0123) and any companies maintaining utilities along the right-of-way and request their assistance in locating utilities in that area. The Contractor, however, shall be solely responsible for the location of the utilities. A Joint Meet (96 hour process) should be scheduled by the Contractor in accordance with the latest edition of the JULIE Excavators Manual.
- H) Equipment - Tool boxes, equipment, and materials shall not be placed in roadways, driveways, walkways, or any place where they will interfere with pedestrian or vehicular traffic. If it is necessary to obstruct a driveway or walkway, prior permission must be obtained from the owner involved.

3.4.04 SURFACE REMOVAL - The Contractor shall remove the surface materials along the proposed pipeline if indicated on the Drawings only to such widths as will permit a trench to be excavated, which will afford sufficient room for proper safety and construction. Where driveways, pavements, drainage, and utilities are encountered, care shall be taken to protect such against fracture or disturbance beyond reasonable working limits.

- A) Trenches in Lawns - Care shall be taken in making excavations in lawns, or other grassed areas, to preserve the sod and topsoil so that it may be replaced in proper sequence when backfilling. A tarpaulin shall be used to separate the sod from other backfill material.

When trenching equipment is to be used for excavation in grassed areas, the sod shall be removed along the trench line prior to the start of actual excavation. Wood planks shall be used as a platform for the trenching equipment, when necessary, to avoid damage to grassed areas.

- B) Piling Earth - The soil shall be piled in such a manner that it will not prevent access to fire hydrants, mailboxes, or valve boxes of other utilities. The soil shall not be placed in the gutter, unless other drainage is provided, such as placing boards to span the gutter so that water can drain through the gutter beneath the boards. If at all possible, the soil should be kept between the trench and road traffic. The soil shall clear the trench excavation by at least twelve inches (12").

3.4.05 WIDTH OF EXCAVATION

- A) The Bottom Width of the trench at and below the top of the pipe and inside the sheeting and bracing, if used, shall be a minimum of the outside diameter of the

pipe, plus six inches (6") and a maximum of the outside diameter of the pipe, plus twenty inches (20").

- B) Trench Sheet piling and bracing, or a trench shield, shall be used as required by the Rules and Regulations of OSHA.

3.4.06 EXPLORATORY EXCAVATION - Whenever, in the opinion of the Engineer, it is necessary to explore and excavate to determine the best line for the construction of the proposed pipeline, the Contractor shall make explorations and excavations for such purposes.

3.4.07 ROCK EXCAVATION - Wherever "rock" is used as the name of excavated material, it shall mean boulders or pieces of natural rock measuring one (1) cubic yard, or more, hard shale or solid ledge rock which, in the opinion of the Engineer, requires for its removal and continuous use of pneumatic tools, or drilling and blasting.

- A) Extra Payment for rock excavation may be allowed as per General Conditions. Before extra payment is allowed, however, the Contractor shall be required to demonstrate the material cannot be removed by hand pick, or by power operated excavator or shovel.
- B) No payment shall be made for rock excavations, unless air tools or explosives are used by the Contractor. Any blasting done to facilitate rock excavation shall be done according to Federal Regulations and the Standard Specifications. No rock excavation is anticipated

3.4.08 BRACED AND SHEETED TRENCHES

- A) Open cut Trenches shall be sheeted and braced, or otherwise protected as required by any governing Federal or State Laws and Municipal Ordinances, and as may be necessary to protect life, property, or the Work. In any event, the minimum protection shall conform to the recommendations in OSHA Safety and Health Standards of Construction.
- B) A Sand Box, or trench shield, may be used in lieu of sheet piling as permitted by OSHA.
- C) When Close Sheet piling is used, it shall be so driven as to prevent adjacent soil from entering the trench either below, or through, such sheet piling.

3.4.09 TRENCHES WITH SLOPING SIDES, LIMITED - The Contractor may, at his option, where working conditions, easements, and rights-of-way permit (as determined by the Owner's Representative), excavate pipeline trenches with sloping sides, but with the following limitations:

- A) Limited - In general, only braced and vertical trenches will be permitted where trenches endanger structures and buildings.

- B) Sloping Sides - Where trenches with sloping sides are permitted, the slopes shall not extend below the top of the pipeline and trench excavations below this point shall be made with vertical sides, with widths not exceeding those specified in Paragraph 3.4.05 for the various sizes of pipes. Sloping sides above the pipe shall be as OSHA Regulations required.

3.4.10 PILING EXCAVATED MATERIAL - All excavated material shall be piled in a manner that will not endanger the WORK and that will avoid obstructing road and driveways.

3.4.11 REMOVAL OF WATER - The Contractor shall, at all times during construction, be responsible for all erosion control, provide and maintain ample means and devices with which to promptly remove and properly dispose of all water entering the excavations, or other parts of the Work, until all work to be performed therein has been completed.

3.4.12 EXCAVATION PROTECTION - Excavations shall be protected by barricades. The entire excavation shall be roped off or fenced and flagged when the work area is unattended. All barricades, signs, fencing, etc. shall be supplied by the Contractor. No excavations may be left open over weekends or holidays.

- A) Safety Signs and Flags - Safety signs and flags shall be used when a trench is opened and when men are working. Special care shall be taken in placing safety signs, or flags, so that traffic will be adequately warned of the danger. Material and equipment shall be kept out of the way of pedestrians and traffic and shall be stored in a safe manner.
- B) The Rules and Regulations by OSHA, and appropriate authorities (such as the Illinois Department of Transportation) respecting safety provisions shall be observed. The IDOT "Manual on Uniform Traffic Control Devices" for streets and highways shall be followed.

3.4.13 CONSTRUCTION IN EASEMENTS

- A) Private Property - In easements across private property, the Contractor shall confine all operations in the easement area and shall be responsible and liable for all damage outside of the easement area, including crop damage.
- B) Surface Improvements - Trees, fences, shrubbery, or other types of surface improvements located in easements shall require protection during construction.

3.4.14 BACKFILL

Remove all timber, chunks of wood, or other organic material from the backfill. No trash or debris will be allowed in the backfill at any time. Special precautions must be taken with frozen backfill material to prevent clods from falling directly on the pipe.

In rocky soil, a minimum of six inches (6") of rock-free soil padding should be provided beneath,
Salem

around, and above the pipe. Rock shield may be used in lieu of dirt padding to protect the pipe.

Sufficient backfill shall be used so that no depressions remain after settling to interfere with traffic or drainage. Excessive mounds shall be avoided. The backfill shall be compacted by use of tamping machines, rolling or wetting down.

Avoid delays in backfilling to prevent the open ditch from interfering with traffic or normal activities. Special attention must be given to adjacent structures to prevent damage during backfilling. Any tile runs interrupted by the ditch shall be carefully restored and protected.

Ditch checks shall be installed, where required, by use of sandbags or other methods.

Granular backfill shall be used at all road and driveway crossings above sand fill around pipe.

Special care shall be taken to fill voids due to settling or cave-ins caused by boring equipment.

3.4.15 ROAD CROSSINGS

- A) All highway and road crossings shall be continuously maintained to insure safe passage of traffic. Where crossing is made by the open ditch method, by-pass roads, temporary backfill, or temporary bridging shall be installed to permit the uninterrupted flow of traffic. At all crossings, adequate and proper traffic aids such as warning signs, flares, guards and other safeguards shall be utilized to insure the safety of the public.

All open cut crossings, driveways or roads shall be backfilled with sand to six inches (6") above top of pipe and should contain no stones, and should be spread in uniform layers as to completely fill the trench with a uniform dense backfill on the pipe. The remainder of the trench shall be filled with Aggregate Surface Course, Type B, CA-6 or CA-10. In instances where the bore for the crossing leaves voids around the pipe due to cave-ins, washouts, or shifting of the soil, these shall be backfilled with granular backfills above and compacted by hand tamping or machine tamping.

3.4.16 DIRECTIONAL BORING

The procedures outlined in this section should be followed whenever directional boring is being used.

DAMAGE PREVENTION WHEN BORING

- A) Use the one-call notification system (J.U.L.I.E.) to have facilities within the immediate area located and marked. Directly contact known, non-participating utility owners for facility location.
- B) Ensure that known facilities are located and marked prior to commencing work.
- C) Expose facilities within the immediate work area by hand excavation before starting a bore if the depths of the facilities are not established by other means.

- D) Consider sewer systems within the area. Sewer systems are especially vulnerable to damage from boring operations for the following reasons:
 1. Lines are often non-metallic, making them difficult to locate.
 2. Clean-outs or other indications of laterals may be hidden or non-existent.
 3. Damage may not be readily apparent when a sewer, particularly a gravity flow system, is pierced by a boring machine.
- E) Notify residential and business neighbors in the area of impending work.
- F) Ensure adequate clearance of overhead electric, telephone, or cable lines.

PROTECTING EXISTING GAS FACILITIES

- A) When it is anticipated that the bore will cross or come near the edge of an underground facility, expose that facility to determine its precise location to ensure adequate separation between the existing and proposed facilities. ***It is a requirement that private sewers be located and exposed, at the Contractors expense, prior to boring.***
- B) When the bore will run parallel to an existing facility, expose that facility (pothole) or use locating technology to verify that adequate clearance is maintained between the bore and the existing facilities during the boring operation (for both the drilling of the pilot hole and the back reaming operation). Calculation of the separation distance should account for the largest diameter back reamer that will be used in the boring process.
- C) Where potholes are used for visual inspection, they should be placed at intervals that will ensure that clearance is maintained during boring operations. Factors to consider for pothole intervals include the following:
 1. Proximity of proposed bore path to the pipeline facilities.
 2. Type of facility (existing and proposed).
 3. Type of soil.
 4. Size and controllability of the bore.
- D) Locate the existing facility and the newly installed facility to ensure that the installation is in the intended location.
- E) Conduct a leakage survey over pipelines that could have been affected by the trenchless installation.

LIMITS AND OBSTRUCTIONS

Obstructions that should be considered include the following.

- A) Magnetic influences within 75 feet of the proposed bore path.
- B) Buried or abandoned structures.
- C) Utility infrastructure.
- D) Underground or elevated pipelines.
- E) Overhead obstructions at the drill site or exit areas.
- F) Geotechnical characteristics.

INSTRUMENTATION

- A) A surface monitoring system may be used to track the location of the down-hole probe during the pilot hole drilling. The installer should ensure that such

monitoring controls the drilling path accuracy and allows for necessary corrections. The space between monitor readings is determined by the need for accuracy in placement of the pipeline.

- B) Some form of gauging should be used to monitor the pulling force.

CONSTRUCTION INSPECTION

- A) The installers should ensure that the pipe pull section is adequately supported during pullback. PE pipe should be protected during pullback.
- B) The proper containment and disposal of drilling mud or fluids should be verified to ensure compliance with applicable requirements.
- C) Other considerations are as follows.
 1. Pipe handling during stringing, welding, and pullback operations. Care should be taken to prevent stretching and/or deformation of PE pipe.
 2. Pipeline testing process.

DAMAGE CAUSED BY DIRECTIONAL DRILLING

If damage is done to existing utilities, the following shall be done.

- A) The situation shall be stabilized to prevent additional safety hazards and to prevent more damage to utilities. (Note: Safety hazards can include electrocution, explosion, and contamination depending on the type and size of pipeline damaged.)
- B) The affected utility shall be notified of the damage created, including preliminary observations by the boring machine operator of the location and nature of the damage.
- C) One call enforcement shall be notified of the damage. Information needed by one call includes dig number for the area, type of facility, the affected utility, and the location of the damage at the dig site. See Section 3 for more details on reporting main line damages to one call.
- D) Boring in the affected area shall be delayed until the hazard is removed and additional locating is done to prevent future damage. This additional locating can include hand digging and additional line locates. Once an area is determined to be safe and the true location of the damaged utility is located boring can resume.

3.4.17 CLEAN-UP

Following the installation and backfilling of the pipe line, the right-of-way and the surrounding area traversed shall be restored to its former condition. All holes and ruts shall be repaired and smoothed over and the area restored to a stable and usable condition consistent with the use intended prior to building of the pipe line.

The good will of the property owner, private or public, is essential. All temporary roads, bridges and culverts shall be removed, unless required for permanent access and meet with the land Owner's approval.

Fences shall be restored in kind to their former strength and condition, or better. Other types of enclosures, such as hedges, require special attention.

All surplus materials and all tools and temporary structures shall be removed from the site by the Contractor. All dirt, rubbish, and excess earth from the excavation shall be hauled to a dump provided by the Contractor and the construction site left clean and acceptable to the Owner Representative's discretion at the earliest possible date. No open burning will be allowed.

Clean-up shall be performed as nearly as practicable behind the rest of the construction to prevent inconvenience to the property owner. Complete co-operation with the owner is essential to insure that all requirements of right-of-way agreements are satisfied.

3.4.18 SEEDING

Where existing grassed areas have been disturbed by construction operation, or where designated by the Engineer, the Contractor shall prepare seed beds, furnish and spread fertilizers and lime and furnish and plant seeding as specified below.

A) Material

1. Fertilizer shall be standard commercial 10-8-6 grade, uniform in composition, free flowing and suitable for application with approved equipment.
2. Lime shall be ground limestone containing all of the finer particles obtained in the grinding process and ground sufficiently fine so that not less than eighty percent (80%) will pass through a No. 8 sieve.

B) Preparation of Seed Bed

1. After the areas to be seeded have been brought to the proper grades and cleared of all stones, boulders and debris, the areas shall be thoroughly tilled to a depth of at least three inches (3") by discing, harrowing, or other approved methods.
2. Fertilizer shall be distributed uniformly at the rate of four hundred (400) pounds per acre, over the area indicated to be fertilized, and shall be incorporated into the soil to a depth of at least three (3) inches by discing, harrowing or other approved methods acceptable to the Engineer. The incorporation of fertilizer may be a part of the tillage operation specified above.
3. Lime shall be distributed uniformly on all areas to be fertilized at the rate of one (1) ton to one (1) acre and shall be incorporated in the soil to a depth of at least three (3) inches by discing, harrowing, or by other methods acceptable to the Engineer, immediately following or simultaneously with the incorporation of the fertilizing.

- C) Seeding Methods - No seed shall be sown during high winds or when the ground is not in a proper condition for seeding. Equipment shall be operated in a manner to insure complete coverage of the entire area to be seeded.

Within 12 hours all seed areas shall be rolled at right angles to the runoff with an approved type roller or culti-packer to compact the seed bed and place the seed in contact with the soil. The optimum depth for seeding shall be one quarter inch. Following installation of the fertilizer and seed, straw should be placed over the area seeded as needed.

- D) Disposal of Surplus Excavated Material - Surplus excavated material not seeded for backfill shall be promptly removed from the site by the Contractor.

The cost of removal and disposal of surplus excavated materials will be included in the price bid and no additional payment shall be allowed therefore.

SECTION 3.5

INSTALLATION

3.5.01 GENERAL

The Work to be performed under this Specification includes the installation of all steel pipeline, casings, and bores, cathodic protection and associated appurtenances. The Contractor shall be responsible for the safe storage of all materials to be used in this Work until it has been incorporated into the Work. Attention is directed to the General Conditions and also other sections of the Specifications which offset the Work under this section.

3.5.02 SUPERVISION AND EMPLOYEES

The Contractor shall have an experienced Superintendent on the job at all times. He shall have read and be familiar with these Specifications and the Drawings, and be prepared to direct the work in such a manner as to obtain compliance with these Specifications and Contract Documents. Lack of experience with gas piping construction will constitute a valid reason for complete removal of any Superintendent. All employees engaged in the execution of this Contract shall be experienced and qualified in the work they perform so as to produce a first class installation.

3.5.03 LAYING OF PIPE

Under normal circumstances, a minimum of twenty-four inches (24") of cover below future finished grade of the surrounding area is required. Additional cover may be required at highway bores and road crossings as indicated on the Drawings. All waterways shall be crossed at least three feet (3') below flow line of waterway. This depth is to apply to all pipe within the waterway and to twenty-five feet (25') each side of the crest of the backslope. In cultivated areas, or in areas where grading is to be done, or where the area is subject to erosion, additional cover may be required to compensate for these conditions. Cover shall be as indicated on the Drawings, including IDOT permits.

- A) Polyethylene Pipe Installation - Plastic pipe shall not be installed above ground. It shall be supported by a firm rock-free bed so as to avoid shear or tensile stresses resulting from backfill, thermal expansion and contraction, or external loading.
- B) Skids - Skids used to support pipe alongside ditch prior to lowering shall be of sufficient cross-section and strength to support pipe without danger of breaking. They shall be of sufficient length and bearing to provide necessary support at each side of the ditch when used to support pipe over the ditch. Padding shall be used where skids are in contact with coating.
- C) Bends - The number of bends shall be kept to a minimum by proper grading of the ditch in approaches to road crossings, streams, shallow water course, across rises in the ground, and other obstructions. Changes in vertical or horizontal directions shall be accomplished by use of fittings, if possible, as indicated on the

Drawings.

- D) Night Capping - The open ends of the pipe shall be securely closed (water tight under 10 ft. head of water) at the end of each day's work, or when work is discontinued on a section, and shall not be reopened until work on the section is resumed.

3.5.04 DETAILS OF WORK

CLEARING

- A) Clearing is defined as the removal of boulders, rocks, trees, shrubs, grass, weeds, crops, or other obstacles on the construction area or right-of-way which of necessity must be removed to accomplish the work.
 - 1. Contractor shall preserve without injury all roads, poles, lawns, stone walls, ditches, canals, and similar property, as well as trees (in farm yards, groves, orchards, windbreak areas and casual shade trees), shrubs and similar desirable growths, to the full extent consistent with the performance of the work.
 - 2. The method of clearing rights-of-way should take into account matters of soil stability, protection of natural vegetation, and the protection of adjacent resources.
- B) Contractor shall clear the right-of-way only to a width sufficient for his needs in constructing the line, and within the limits of the rights-of-way furnished by Owner.
- C) Contractor shall protect Owner's survey stakes while clearing and thereafter as long as useful.

3.5.05 STRINGING PIPE

- A) All pipe, valves, fittings, pipe coating, casing and material of any description to be used in or about the construction of the facilities hereunder shall be strung on the right-of-way provided by Owner.
- B) Contractor shall take all necessary precautions to prevent injury or damage to pipe and casing during stringing and shall lift all pipe and casing from trucks with slings equipped with padded hooks or padded calipers.
- C) Contractor shall string the pipe so as to leave gaps across the right-of-way where requested by the landowner, tenants, or Owners Representative to facilitate the movement of vehicles, or equipment.

- D) It will be the responsibility of the Contractor to see that the pipe is strung for proper placement of the pipe by size, weight and Specifications as called for herein. Any moving of pipe resulting from failure to comply with these requirements shall be at Contractor's expense.
- E) In muddy and other areas designated by the Owner's Representative, pipe shall be strung on skids high enough to keep foreign matter from entering the pipe.

3.5.06 CROSSING OTHER UNDER GROUND FACILITIES

- A) Protect all underground facilities encountered in the progress of the work.
- B) Underground facilities located at points where excavation is required shall be uncovered by hand before machine excavation will be permitted.
- C) The exact location of all underground facilities (except tile lines) shall be marked with appropriate signs by Contractor prior to the commencement of machine excavation.

3.5.07 JOINTS

- A) All pipe joints shall be thoroughly cleaned and all pipe shall be free from obstructions before pipe connections are made. All main line pipe should be butt fusion except at fittings. Fittings may be electrofusion.
- B) All burrs at end of pipe due to cutting must be removed by reaming to full pipe size.
- C) All open ends must be thoroughly protected.

3.5.08 LOWERING PIPE

- A) All pipe shall be placed on skids at the side of the trench.
- B) The pipe shall be lowered into the trench gradually and uniformly so that each point of suspension bears its proportional part of its total weight.
- C) Pipe shall not be lowered into the trench unless Owner's Representative is present.
 - 1. Contractor shall, before installation of pipe, remove water from the trench to the extent necessary to prevent floating of pipe, and pipe must be kept dry until coating is repaired.
 - 2. Mechanical means or devices shall not be used to force pipe into

the trench.

3. Pipe shall not be hauled or handled by any means or process which allows risks of injury to the pipeline or prevents inspection of the pipeline in place in the trench before same is covered, except as and to the extent that the Owner's Representative does not prohibit another method of handling.
4. If rock is encountered, padding material free from rock or gravel, (subject to approval of the Engineer) shall be placed around the pipe to protect the pipe coating from injury.
5. Distribution of slack in the line shall conform to the following:
 - a. Contractor shall construct pipelines hereunder so as to provide adequate slack and properly distribute such slack throughout the pipeline.
 - b. All overbends shall be installed to allow six inches (6") clearance or more between pipe and trench bottom.
 - c. Sag bends will conform to the bottom of the ditch

3.5.09 CLEANING AND PIGGING

The entire length of installed main shall be cleaned by the Contractor with suitable smooth "pigs" before testing is done and tie-ins are made.

3.5.10 MISCELLANEOUS

- A) Any gouges, grooves, dents or arc burns in the pipeline resulting from Contractor's operations, as further defined below, shall be removed by Contractor, at no expense to Owner.
- B) Fusion operations shall not be performed during periods of rain or excessive wind, unless such operations can be properly protected by the use of shields or other shelter.
- C) Pipe Damage - No dents, gouges, or grooves shall be permitted in the pipeline.

3.5.11 TRACE WIRE

- A) Contractor shall install trace wire in valve boxes.
- B) If after testing by Owner's Representative the leads are found to be inoperative, the leads will be repaired or replaced at Contractor's expense.

3.5.12 TESTING AND PURGING POLYETHYLENE PIPE

- 1) All polyethylene mains and services shall be subjected to a standup air test of at least one hundred (100) psig. All mains shall be pressure tested prior to being placed in service. All welds, or connections, shall be left exposed until the testing is completed. All testing shall be conducted using a 4" diameter (minimum) pressure gauge, 0 to 100 psig, recording gauge, or a dead weight tester. Any drop in the initial test pressure not explained by a temperature change shall result in a failed test. Mains shall be tested for a minimum of 8 hours, while service lines may be tested for at least 10 minutes. No test shall be terminated without the approval of the Owner.
- 2) Prior to being placed in service, (test required), all piping shall be purged with gas until completely air free. A moderately rapid and continuous flow of gas shall be introduced at the one end of the gas line and air vented at the other end. The gas flow shall be continued without interruption until vented gas is free from air.

3.5.13 CUSTOMER RE-LIGHTING

Upon completion of all service line installations, the Contractor shall be responsible for re-lighting all appliances at the customer's residences.

3.5.14 RECORDKEEPING

All test records of main and service lines shall be turned in to the Gas Superintendent *daily*. Main and Service line installations require the completion of the "Main/Service Installation or Replacement Form", a sample of which is included at the end of this section. Additionally, service line installations require the completion of a Meter Card, which contains basic information such as Date, Service Address, and Old and New Meter Readings. A sample of the "Gas Service Line Record Inspection Report", also required for service line installations, is provided at the end of this section.

3.5.15 CLEAN-UP

- A) General - Contractor shall keep all working areas clear and free from any accumulation of defective material junk, brush, trees, rock and boulders and similar movable objects during the entire process of the work.
 1. All such movable objects shall be accumulated, segregated and disposed of by Contractor in areas approved by the Owner and at Contractor's expense.
 - a. Each of Contractor's crews shall keep all working areas completely clear and free from junk and debris resulting from their particular operation, including immediate disposal of discarded welding rod, pipe trimmings, paint containers, broken skids or any other similar material that might become hazardous if worked into

the surface of the ground by traffic.

- b. In all phases of cleanup, there shall be no open burning. Contractor shall, as a contingency of the work, haul and dispose of any material, debris, trees, stumps or vegetation from the right-of-way.
 2. Contractor shall restore drainage ditches as required for the continuation of gravity flow.
- B) As soon as the work is completed, Contractor shall clean the entire area utilized by his organization.
1. All new or used construction materials not incorporated in the work shall be neatly piled or stacked on the site of the work, as designated by the Owner's Representative.
 2. In respect to pipeline construction, final cleanup work along the right-of-way shall be done continuously as the work progresses and shall follow the lowering operation.
 3. The work shall not be deemed completed for the purpose of payment until all provisions have been complied with to the satisfaction of the Owner.

**City of Salem, Illinois
GAS SERVICE LINE RECORD INSPECTION REPORT**

1. Location of service line: Lot _____ Block _____ Subdivision _____
Address _____
2. Date of installation _____
3. Installer of service line _____
Address _____
4. Type of piping installed _____

5. Depth of service line _____
6. Cathodic protection (steel service only) _____

7. Pressure testing date _____
8. Testing results — Punch tee to meter _____ psig — for _____ minutes
9. Comments: _____

Form No. 79523

Main/Service Installation or Replacement Form

Rev. 10/15/2015

City/Company:

Date of Installation:

Location of Installation:

Main Service Line

Pipe Information

Pipe Type:

Pipe Size:

Length of Pipe:

Type of Fusion:

Wall Thickness:

Yield Strength:

Lot Number:

Manufacturer:

Manufacture Date:

Pressure Test Information

Test Medium:

Start - Time/Date:

End - Time/Date:

Pressure at Start:

Pressure at End:

Line Loss:

Amount of Loss(MCF):

Reason for Line Loss:

Purge Checklist: Was the line purged: Yes No What was purged from the line: Gas Air Nitrogen

Was a CGI used: Yes No Was the gas/air purged completely: Yes No How long did the purge last:

Installation Checklist:

Pipe to Soil Reading: Yes No Reading:

Pipe Wrapped: Yes No

Wrap Type:

Welds Tested: Yes No

Tracer Wire: Yes No

Material List: Yes No

EFV Installed: Yes No Capacity of EFV: cfh

Materials Used/Manufacturer:

Meter

Service Tee

Regulator

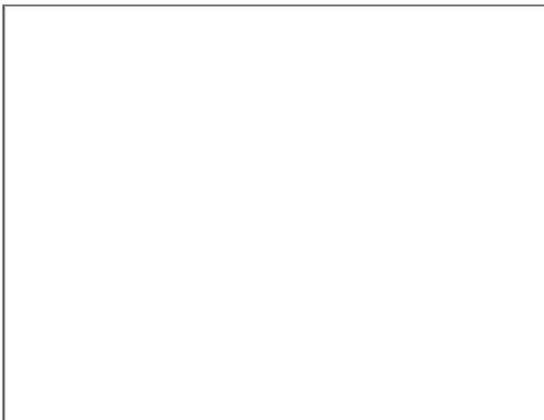
Valves

Fittings

Tracer Wire

Other

Diagram of Installation



SECTION 3.6 **PAYMENT**

3.6.01 PAYMENT BASIS

- A) Payments shall be made on the Contract Unit Price Bid on the items listed in the “Bid Schedule” and shall be based on construction (stake or re-stake) station numbers and estimates of work completed.

3.6.02 FINAL PAYMENT

- A) Prior to requesting Engineers inspection for final completion of project, complete the following and submit to Engineer in one package:
1. Final pay request with Contractor’s lien waiver for entire project amount and subcontractors and material men lien waivers evidencing payment in full.
 2. Consent of Surety to Final Payment.
 3. Contractor’s affidavit that all payrolls and bills have been paid in full.
 4. Contractor’s one year warranty.
 5. All punch-list items are complete.
 6. Advise Owner of pending insurance change-over requirements.
 7. Discontinue and remove from site all temporary facilities and services and remove construction tools and facilities.
 8. Complete final clean up.
- B) Inspection procedures: Upon receipt of Contractor’s properly executed request, Engineer will proceed with inspection and either recommend to Owner that final payment be released or advise Contractor of work that must be performed prior to the recommendation. Inspection will be repeated upon assurance that remaining work is complete.